The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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INSTITUTION OF CIVIL ENGINEERS 25 GREAT GEORGE ST S.W.

MR. JAMES H. CROFTS, STOCK AND SHARE BROKER,
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.
Established 1842.

BUSINESS transacted in all descriptions of MINING Stocks and Shares (British or Foreign), Banks, Bonds, Railways, Miscellaneous, Insurance, Assurance, Gas, Water, and Dock Shares.
BUSINESS negociated in Shares not having a general market value.
BUSINESS in all COLLIERY and IRON Shares.
Accounts opened for the Fortnightly Settlement.
Monthly and Daily Price Lists issued.
Bankers: City Bank, London; South Cornwall Bank, St. Austell.

SPECIAL DEALINGS in the following or any part:—25 Bampfylde, 35s.; 20 Bilson; 50 Birdseye, £2 15s. 6d.; 10 Brighton Aquarium; 100 Cardiff and Swansea; 15 Cedar Creek, £1 12s. 6d.; 10 Consett, £15¼ pm.; 75 Chapel House, £4 5s. 6d. (cum div.); 50 Don Pedro, 9s.; 30 Diamond Fuel; 50 Flagstaff, £2¾; 100 Glaisdale Quarry; 55 Gold Run; 20 Grogwinion, £3¾; 20 Hooper's Telegraph; 100 Javali; 50 Langdale Chemical; 30 Lawes ditto; 50 Live Stock Insurance, 17s.; 5 Nant-y-Glo; 25 New Sharlston; 25 Newport Abercarn; 100 Old Treburgett (ordinary), 8s. 3d.; 80 Parys Mountain, 8s. 3d.; 25 Palmer's Shipbuilding; 100 Positive Assurance, 14s.; 25 Rookhope; 40 Sweetland, £2 7s. 6d.; 50 Thorp's Gawber, £13¾ (cum div.); 10 Tankerville, £9¾; 25 West Mostyn, £2¾; 50 West Tankerville, 20s.; 12 Westminster Brewery (paying 6 per cent.), fully paid, £4¼.

*** SHARES SOLD FOR FORWARD DELIVERY (one or two months) ON DEPOSIT OF 20 PER CENT.

NOTE.—SPECIAL BUSINESS in CHAPEL HOUSE COLLIERY shares, yielding at present prices, upwards of 17 per cent., with every probability of an important increase. Also JAVALI, OLD TREBURGETT, THORP'S GAWBER, and GLAISDALE QUARRY.

MR. W. H. BUMPUS, STOCK AND SHARE BROKER,
44, THREADNEEDLE STREET, LONDON, E.C.,
Transacts business in MINING and COLLIERY Shares of every description. English and Foreign Stocks, Colonial Government Bonds, Railways, Banks, and Miscellaneous Shares, and all Securities dealt in on the London Stock Exchange, for INVESTMENT or SPECULATION.
Purchases and Sales negociated in Unmarketable Stocks and Shares.
Speculative Accounts opened for the Fortnightly Settlement.
References given and required when necessary.
A Stock and Share List forwarded to *bona fide* Investors free on application.
Bankers: The National Provincial Bank of England, E.C.

W. H. B. has SPECIAL BUSINESS in the undermentioned:—

50 Bog, 12s. 9d.	40 Flagstaff, £2 18s. 9d.	25 Richmond, £7 6s. 3d.
40 Bampfylde, 36s.	100 Gold Run, 16s.	10 Roman Grav, £12 18 9
50 Birdseye Ck., £2 16s 6	50 Last Chance, 23s.	40 So. Rom. Grav., 19s 6d
20 Chicago (Silver), £3½.	20 Ladywell, £2 16s. 3d.	15 So. Condurrow, £5½.
100 Chontales, 11s.	25 Marke Valley, 26s. 6d.	60 So. Prince Patrick, 39s
25 Cardiff and Swansea.	50 Melindur Val., £2⅞.	30 Sweetland Crk., £2⅝.
2 Carn Brea, £52⅞.	80 Malabar, 13s. 6d.	2 Tincroft, £27⅜.
50 Cedar Creek, 33s. 6d.	50 Malpaso, 18s.	10 Thorp's Gawber.
100 Clee Hill Col., 6s. 9d.	20 New Quebrada, £3 8s 9	100 Tecoma, £1 6s. 3d.
5 Cape Copper.	50 No. Prince Patrick, 18s	20 Tankerville, £9⅝.
40 Chapel House Colliery	20 New Consols, £2¼.	50 Tyllwyd, 21s.
75 Cathedral, 19s.	50 Old Treburgett, 10s.	10 Van, £23½.
30 Devon Consols, £2⅛.	20 Pennerley, 33s. 6d.	25 Van Consols, £2.
1 Dolcoath.	50 Prince of Wales, 10s 6d	15 Wheal Grenville, £5.
10 East Lovell, £7¾.	200 Plynlimmon, 3s.	25 Welsh Freehold, £2 13 9
50 Emma (Silver), £1 19 6	50 Port Phillip, 16s. 3d.	20 West Chiverton, £2¾.
20 Eberhardt, £4 14s. 6d.	100 Penstruthal, 13s. 3d.	10 Wheal Peevor, £5 8s 9
25 East Caradon, 23s.	70 Parys Mountain, 8s 6d	25 West Tankerville.
70 Frontino, 5s. 9d.	100 Rookhope, 13s.	20 Wheal Uny, £3¼.

MR. E. J. BARTLETT, STOCK AND SHARE DEALER,
No. 30, GREAT ST. HELEN'S, LONDON, E.C., has SPECIAL BUSINESS, at the closest prices, in—

OLD TREBURGETT.	MINERA (Buyer), and
OLD TALARGOCH.	PRINCE PATRICK SHARES.

JOHN RISLEY (SWORN), STOCK AND SHARE BROKER,
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Turkish Six Per Cents. of 1854, 1858, 1862, 1865, 1871, and 1873 specially recommended; Wheal Grenville and Treleigh Wood, also Wheal Peevor and Crebor shares.
Business transacted at the following rates of commission:—Foreign Stocks, ⅛ per cent.; and Mining Shares of £4 each and upwards, 1¼ per cent.; under £4, 1s. per share.

FERDINAND R. KIRK, STOCK BROKER,
5, BIRCHIN LANE, E.C.
Consols, Foreign Bonds, Railways, and every security quoted on 'Change bought and sold.
Bankers: London and Westminster, and City Bank.

SPECIAL BUSINESS in the followtng:—

Altami Colliery.	Earle's Shipbuilding.	New Sharlston.
Bilson and Crump.	Ebbw Vale.	Pawson and Co.
Bagnall, John.	Eley Brothers.	Peninsular & Oriental.
Butler's Wharf.	Fairbairn Engineering.	Phosphate Sewage.
Brighton Aquarium.	Fore-street Warehouse.	Richards and Co.
Cardiff and Swansea.	Foster, Porter, and Co.	Silkstone Fall.
Chapel House.	Hudson's Bay.	Thorp's Gawber.
Central Swedish.	Hooper's Telegraph.	Whitehaven.
City Offices.	Littledean Colliery.	West Mostyn.
Diamond Rock.	Nant-y-Glo.	Welsh Freehold.
Diamond Fuel.	Newport Abercarn.	

OFFERS WANTED FOR—

Bagnall, John.	Newfoundland Lead.	United Bituminous.
Britannia Iron.	South Cleveland.	West Mostyn.
Bonville's Court Coal.	Silkstone Fall.	

MR. WILLIAM WARD
(LATE WARD AND LITTLEWOOD),
CROSBY HOUSE,
95, BISHOPSGATE STREET WITHIN, E.C.,
STOCK AND SHARE BROKER.

G. E. SIMPSON, STOCK AND SHARE DEALER,
6, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C., will SELL the FOLLOWING SHARES, free of commission:—

30 Bampfylde, £1 15s.	30 Eberhardt, £4 17s. 6d.	30 Rosewall Hill, 8s. 6d.
25 Birdseye Creek, £2 13 9	15 East Lovell, £6 12s. 6d	25 Richmond, £7 8s. 9d.
45 Bog, 12s. 3d.	40 Gold Run, 13s. 6d.	10 Roman Grav., £12 16 3
30 Cakemoor, £5.	10 Great Laxey.	30 Sweetland Crk., £2 7 6
75 Chontales, 11s.	60 Glaisdale, 20s.	40 St. Patrick.
50 Chapel House, £4 6s 3	50 Javali, 9s. 3d.	50 So. Rom. Grav., 18s 6d
1 Carn Brea, £51.	40 Ladywell, £2 15s.	2 Tincroft, £27½.
50 Cedar Creek, £1 12s 6d	30 Marke Valley, 24s. 3d.	20 Tankerville, £9 10s.
30 Devon Cons., £1 18s 9d	45 Pennerley, £1 11s. 3d.	5 Van, £23 2s. 6d.
50 Emma, £1 6s. 3d.	50 Penstruthal, 12s. 9d.	20 Wh. Peevor, £5 8s. 9d.

JOHN MOSS AND CO., STOCK AND SHARE DEALERS,
224 AND 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C., transact Business for cash or account on all descriptions of Stocks and Shares.
J. M. and Co. strongly advise the immediate purchase of North Prince Patrick shares, as a great rise is certain. We have just inspected this mine. Report on application.
Fortnightly accounts opened on advantageous terms.
J. M. and Co. have BUSINESS in the undermentioned SHARES, at quoted prices, free of commission:—

40 Bampfylde, £1½.	60 Frontino, 8s.	50 Prince of Wales, 11s.
30 Birdseye, £3¼.	100 Gold Run, 16s.	30 Roman Gravels.
20 Cape Copper, £30.	20 Great Laxey.	25 Richmond, £7¼.
5 Carn Brea, £58.	50 Hingston, 22s.	20 So. Condurrow, £5¾.
50 Chapel House, £4½.	30 Last Chance, £1½.	25 So. Prince Patrick, 45s
40 Chicago.	50 Marke Valley, 23s.	70 St. David's, 22s.
70 Chontales, 10s.	50 New Rosario.	30 Sweetland, £2½.
70 Cedar Creek, 23s.	40 New Quebrada, £3¼.	20 Tankerville, £9½.
50 Crenver.	50 North Prince Patr. 22s	300 Untd. Bituminous.
10 Devon Cons., £2½.	100 Old Treburgett, 8s.	15 Van, £23.
65 Don Pedro, 11s. 3d.	75 Parys Mountain, 8s. 6	25 Van Consols, £2.
25 Eberhardt, £4½.	30 Pedn-an-drea, £6.	20 W. Esgair Lle, £2.
30 Emma, £1¾.	40 Pennerley, 31s.	10 West Chiverton, £2¾.
45 Flagstaff, £2½.	100 Penstruthal, 12s.	50 Whitby Gas.

50 Prince Patrick.

Circular now ready, and can be had on application.
Bankers: The London and County Bank, Lombard-street.

P. WATSON, STOCK AND SHARE DEALER,
79, OLD BROAD STREET, LONDON.
Bankers: The Alliance Bank (Limited); and Union Bank of London.

MR. ALFRED E. COOKE, STOCK AND SHARE DEALER,
76, OLD BROAD STREET, LONDON.
(Established 1853.)
The following shares should be purchased:—
GLAISDALE QUARRY, at 20s.; dividends expected in a few months.
CHAPEL HOUSE, at £4½; dividends, 15 per cent., declared quarterly.
THORP'S GAWBER, at £14½, £15½; dividends, 40 per cent., declared quarterly.
CAKEMORE COLLIERY, at £5; dividends expected in a few months.
All the above shares are fully paid. Full particulars may be had on application.
Mr. COOKE guarantees to supply the following shares, or any part:—

20 Bampfylde, 36s.	20 Emma.	20 Pennerley, 31s.
20 Birdseye.	40 Glaisdale, 20s.	100 Parys Mountain, 9s.
5 Bilson & Crump, £10½	50 Gold Run.	50 Rookhope, 13s.
40 Cakemore Colliery, £5	50 Javali, 8s. 9d.	10 Thorp's Gawber, £14½
20 Cardiff & Swan., £4½.	20 Ladywell.	5 Wheal Peevor, £5½.
1 Carn Brea, £51.	5 New Hobbs Hill, £2.	10 Tankerville.
30 Chapel House, £4 6s. (cum div.)	30 Old Treburgett, 8s. 9d	50 West Tankerville.
	20 Penstruthal, 13s. 3d.	10 West Chiverton, £2 8s

Shares may be had for settlement at the end of March, subject to the payment of a deposit of 20 per cent.
Cheques to be crossed Alliance Bank.

MR. T. E. W. THOMAS, SWORN SHARE BROKER,
3, GREAT WINCHESTER STREET BUILDINGS, E.C.
Established 1857.

The following are the latest prices at which business could be done. Where the difference between the buying and selling price is wide transactions may be effected at an intermediate price:—

	Buyers.	Sellers.
Bampfylde	£ 1½	£ 1¾
Birdseye Creek	2⅝	2¾
Bog	11s.	13s.
Bronfloyd	1⅜	1⅝
Carn Brea	50	52
Cedar Creek	1½	1¾
Chontales	10s. 6d.	11s. 6d.
Cook's Kitchen	9	9½
Devon Great Consols	1¾	2
Ding Dong	6	8
Dolcoath	48	50
East Lovell	6½	6¾
Eberhardt	4½	5
Emma	1¾	1⅞
Flagstaff	2⅝	2¾
Gold Run	12s.	14s.
Javali	8s. 6d.	9s. 6d
Ladywell	2¼	2¾
Marke Valley	23s. 6d.	24s. 6d.
New Consols	1¾	2¼
Parys Mountain	8s. 6d.	9s. 6d.
Pennerley	1½	1⅝
Penstruthal	12s.	13s.
Prince of Wales	8s. 6d.	9s. 6d.
Providence	£ 4⅛	£ 4¾
Richmond	7¼	7½
Roman Gravels	12⅝	12⅞
Rosewall Hill	7s.	9s.
St. Patrick	1	1¼
South Condurrow	5	5¼
South Prince Patrick	1¾	2¼
So. Roman Gravels	17s. 6d.	18s. 6d.
Sweetland Creek	2¼	2½
Tankerville	9¼	9½
Tincroft	27	28
United Mexican	3½	3⅝
Van	22¾	23¼
Van Consols	1⅝	1⅞
West Basset	7	7¼
West Chiverton	2½	2⅝
West Maria	5s.	7s.
West Tankerville	19s.	21s.
West Tolgus	65	67½
Wheal Grenville	5	5¼
Wh. Kitty (St. Agnes)	5	5¼
Wheal Peevor	5¼	5½
Wheal Uny	3¼	3⅜

WILLIAM BARTLETT, STOCK AND SHARE DEALER,
FINSBURY SQUARE BUILDINGS, LONDON, E.C.
Business transacted in British, Colonial, and Foreign Securities, Railway, Bank, and Mining Shares at close net prices. The Sale or Purchase of Shares not quoted in the usual Stock and Share Lists may be negociated.
Full particulars of a few Securities well worthy of immediate attention will be forwarded on application, free of charge.

MESSRS. PYNE AND ASHMEAD, CITY MINING AGENTS,
ACCOUNTANTS, AUDITORS, &c.
OFFICES: 6A, BISHOPSGATE STREET WITHOUT, LONDON, E.C.
Messrs. PYNE and ASHMEAD have taken the above offices for the London Management of Companies, the Auditing of Accounts, &c., and have a good Board Room for Directors' and other meetings.
The LIQUIDATION OF COMPANIES also undertaken, especially with a view to prompt winding-up, thereby avoiding unnecessary expense.

MESSRS. W. DUNN AND CO., STOCK AND SHARE DEALERS, 3 AND 4, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C.
Orders received and commissions executed.
Bankers: National Provincial Bank of England.

MESSRS. A. ENDEAN, FISHER, AND CO., STOCK AND SHARE DEALERS, 3, LOMBARD COURT, LOMBARD STREET, E.C.
Bankers: London and Westminster, Lothbury.

MESSRS. W. J. TALLENTIRE AND CO.,
STOCK AND SHARE BROKERS.
20, CHANGE ALLEY, CORNHILL, LONDON, E.C., transact business in Stock Exchange Securities and Mining Shares of every description.
A Selected List of Safe Investments forwarded to intending investors post free upon application. Fourteen years' experience.

MESSRS. HARLAND AND CO., STOCK AND SHARE DEALERS, 235 and 236, GRESHAM HOUSE, LONDON, E.C.
Bankers: London and County Bank.

Messrs. H. and Co. wish to direct attention to the DIVIDENDS declared by CHAPEL HOUSE and ALLTAMI COLLIERIES, and will be happy to supply shares in these companies at market rates.

MR. THOMAS THOMPSON, JUN., 1, PALMERSTON BUILDINGS, BISHOPSGATE STREET, LONDON, E.C.
Some valuable hints as to the purchase of mining shares will be found in Mr. Thompson's "Investment Circular" for February now ready, post free, price 6d.

MR. W. TREGELLAS, 122, BISHOPSGATE STREET WITHIN, E.C.,
Deals in all descriptions of Stocks and Shares at close market prices.

MESSRS. ENDEAN AND CO., STOCK AND SHARE DEALERS, 85, GRACECHURCH STREET, LONDON, E.C.
Government and every negociable Stocks dealt in for cash or account. Order and telegrams punctually attended to.
We advise immediate application and purchase of the BAMPFYLDE and LLANRWST shares. A rise in price is inevitable.

MR. JAMES STOCKER, 2, CROWN COURT, THREADNEEDLE STREET.
Railway, Bank, Foreign Bonds, and all other Stocks and Shares for Investment or Speculation.

SPECIAL BUSINESS in the following:—

50 Almada, 16s.	80 Glaisdale, 18s.	25 Rom. Gravels, £12⅝.
50 Bampfylde, 36s.	55 Great W. Van, 10s. 3d	60 Rio Tinto, £9¼.
5 Bellavista, offer wtd.	30 Grogwinion, £3¾.	75 Richmond, £7¾.
25 Birdseye, £2 16s. 3d.	50 Gawton, 9s. 9d.	100 Rica, 5s. 9d.
30 Bilson & Crump, £10½	15 Hudson's Bay.	40 Silkstone Fall, 26s. 6d.
70 Blue Tent, £5.	15 Ifton Rhyn.	30 Sweetland, £2 8s. 9d.
75 Bog, 12s. 6d.	200 Javali, 8s. 9d.	30 South Aurora, 12s. 6d
10 Cape Copper, £31¼.	100 Killifreth, offer wntd.	55 So. Carn Brea, 23s. 9d.
4 Carn Brea, £51¼.	20 Lawes' Chemical.	20 So. Rom. Grav.
50 Cedar Creek, 32s. 6d.	40 Last Chance, 23s. 9d.	5 St. J. del Rey.
45 Central Van.	40 Ladywell, £2½.	30 Thorp's Gawber.
60 Chontales, 11s. 3d.	50 Malpaso, 16s. 3d.	80 Tecoma, 24s.
30 Chicago, £3¼.	55 Malabar, 12s. 3d.	100 Tyllwyd, 20s.
40 Clee Hill Col., 7s.	30 Marke Valley, 24s.	15 Tankerville, £9 6s. 3d.
70 Chapel House, £4¼.	100 New Rosario, 7s. 6d.	10 Tincroft, £27¼.
25 Cardiff & Swan., £4¾.	25 New Consols, 45s.	100 United Bitum., 6s. 9d.
75 Don Pedro, 8s. 9d.	45 New Sharlstone, £7¾.	40 Van Consols, 36s. 9d.
50 Denbighshire.	20 Newcastle Chem., £4 4	45 Welsh Freehold, £2½.
20 Devon Gt. Con., 40s.	100 Old Treburgett, 8s. 3	15 West Chiverton, 46s 9
50 Emma, 37s.	55 Penstruthal, 13s. 3d.	55 W. Esgair Lle, 36s
20 Eberhardt, £4 18s. 9d.	50 Pennerley, £1½.	70 Wheal Coates, 32s 6d.
20 East Lovell, £6½.	5 Providence, £5¼.	18 Wh. Grenville, £5¾.
55 Flagstaff, £2¼.	70 Prince of Wales, 9s 9d	30 Wheal Peevor, £5½.
60 Frontino, 6s.	100 Port Phillip, 16s. 3d.	15 Wheal Kitty, £5½.
110 Gold Run, 15s. 9d.	30 Rookhope, 11s. 9d.	30 Wheal Uny, £3 3s. 9d.

Bankers: London and Westminster.

MR. CHARLES THOMAS,
MINING AGENT, STOCK AND SHARE DEALER,
3, GREAT ST. HELEN'S, LONDON, E.C.

MESSRS. A. W. THOMAS AND CO.,
10, COLEMAN STREET, E.C.,
MINING AGENTS, AND STOCK AND SHARE DEALERS.

ST. PATRICK MINING COMPANY.—Prospectuses and plans may be obtained upon application to Messrs. A. W. THOMAS and Co.

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MESSRS. PENNINGTON AND CO.'S "MONTHLY RECORD OF INVESTMENTS," published on the first Thursday in each month, contains an exhaustive Review of the British and Foreign Stock and Share and Money Markets, &c., with an enumeration of safe investments, paying from 10 to 20 per cent. Price 6d. per copy, or 5s. annually.
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Buyer of any part of 500 Lovells at 15s.; 1000 Patent Ligno Mineral Paving Shares.
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MR. HENRY MANSELL, STOCK AND SHARE DEALER,
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MESSRS. HARVEY, JORDAN, AND CO.,
MINING AGENTS, ACCOUNTANTS, AUDITORS,
MANAGERS OF PUBLIC COMPANIES, &c.
OFFICES,—30, MOORGATE STREET, LONDON, E.C.
LONDON OFFICES of the LLANTRISSANT TIN PLATE WORKS.

MESSRS. HARVEY, JORDAN, AND CO. undertake personally the INSPECTION of MINERAL PROPERTIES, the MANAGEMENT of COMPANIES entirely, or partially by keeping the accounts at their offices, or by periodical visits to the properties; AUDITING of ACCOUNTS, ARBITRATIONS, &c.

MR. HARVEY, of the above firm, having to VISIT the UNITED STATES and CANADA early in February on Special Business, is PREPARED to UNDERTAKE on the same journey OTHER COMMISSIONS to INSPECT and REPORT on MINERAL PROPERTIES, and furnish reliable information.

MESSRS. J. TAYLOR AND CO., 86, LONDON WALL, E.C.
and MINING EXCHANGE, SOUTH KING STREET, MANCHESTER,
MINING ENGINEERS AND INSPECTORS.
Business done in all descriptions of Stocks and Shares.

MR. E. CHARTERS, 36, NORTHUMBERLAND STREET, CHARING CROSS, LONDON, can do BUSINESS in the FOLLOWING SHARES, free of commission:—

50 Almada, 15s. 3d.	20 Glasgow Carad., £1⅝.	60 Rossa Grande, 2s.
25 Bampfylde, £1¼.	30 Green Hurth, £6⅜.	50 Trumpet Cons., £1⅛.
70 Bog, 11s. 6d.	20 Gunnislake, £3.	10 Tecoma, £1⅛.
10 Birdseye Creek, £2¾.	20 Marke Valley, £1⅛.	5 Tincroft, £27¼.
2 Carn Brea, £51.	50 Malabar, 12s. 6d.	30 Van Consols, £1¾.
50 Cedar Creek, £1¾.	25 Malpaso, 16s. 3d.	70 West Maria, 6s.
20 Cardiff & Swan., £2¾.	20 Medlyn Moor, £5½.	10 West Basset, £7.
10 Chapel House, £4¼.	50 New Fowey Con., 10s 6	20 Wheal Kitty, £5.
50 Cathedral, 17s. 6d.	30 New Sharlston, £7¼.	10 Wheal Peevor, £5½.
6 Dolcoath, £48.	30 New Talargoch, £2½.	20 Wheal Grenville, £4⅛
50 Don Pedro, 9s. 6d.	50 Plynlimmon, 2s. 3d.	30 Wheal Jane, £5.
50 Devon Consols, £1⅞.	30 Pennerley, £1¾.	20 Wheal Uny, £3.
20 Emma, £1½.	50 Pedn-an-drea, £7¼.	25 Wheal Agar, 12s. 6d.
80 Frontino, 7s. 6d.	20 Russia Copper, £3.	10 Wheal Allen, 10s. 6d.
50 Gawton, 10s. 3d.	40 Rosewall Hill, 6s. 6d.	5 Zennor, £3.

MR. TIMOTHY HUGHES,
59, SEEL STREET, LIVERPOOL.

The Registered Office of the PRINCE PATRICK, GROSVENOR, WEST BRYN CELYN, and GREAT EAST FOXDALE LEAD MINING COMPANIES (LIMITED).
Full information respecting these Mines forwarded on application.

RELIABLE INFORMATION given respecting Mines in the Isle of Man, Flintshire, and the neighbouring districts.

CAPTAIN ABSALOM FRANCIS,
MINING AGENT, ENGINEER, AND SURVEYOR.
GOGINAN, ABERYSTWITH.

MR. R. PERCY ROBERTS,
FINANCIAL AGENT,
80, ENGLISH STREET, CARLISLE.

GROSVENOR, ENTWISLE, AND CO.
(LATE GROSVENOR AND CO.),
STOCK AND SHARE BROKERS
88, PORTLAND STREET, MANCHESTER.

FOR SALE (for cash),—20 Thorpe's Gawber Hall Colliery shares, at £13 15s.; 50 Clee Hill Colliery, 5s. each net (or part).
Address, by letter, "D. E. F.," 275, Strand, E.C., London.

WANTED, by the Advertiser, who has had considerable experience in Mining, an ENGAGEMENT as RESIDENT SECRETARY and ACCOUNTANT. Accustomed to dialling and mapping. Has some acquaintance with French and Spanish. Situation at home preferred. Good references.—Address, "M. E.," Post Office, Stroud Green, London.

WANTED, a SITUATION as MINE AGENT, to SUPERINTEND the WORKING DEPARTMENT of any SILVER, LEAD, COPPER, or IRON MINES, at home or abroad.
First-class testimonials from present employers extending over many years' services, and most satisfactory references, can be obtained by applying to "H. P.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

WANTED, a Gentleman to join a Colliery Proprietor for the purpose of EXTENSION and PURCHASING adjoining MINES, and to MANAGE the financial part of the business. Capital required, about £6000.
Apply to HAWKINS and SON, Estate Agents, Machinery Valuers, &c., Brierley Hill, Staffordshire.

ADVANCES MADE ON SALEABLE GOODS IN STORE, or on WARRANTS, or on good BONDS, SHARES, or SECURITIES. £5000 would be placed as sleeping capital in some old established lucrative business where security could be given for the advance.
Principals only may address, "M. W. B.," care of Mr. Vickers, 5, Nicholas-lane, Lombard-street, E.C.

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Address, "Box No. 2," Post Office, Birmingham.

950 BLAKE'S PATENT ORE-CRUSHERS NOW IN USE.
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MR. H. R. MARSDEN, SOHO FOUNDRY, LEEDS.
Only maker in the United Kingdom.

MR JOHN CARTER, MINE SHARE DEALER,
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PROSPECTUS.

This company has been formed to purchase and work an extensive silver-lead mine in the property of the Earl of Mount-Edgcumbe, situate in the parish of Beerferris, Devonshire, a district that has produced immense quantities of silver-lead.

The grant extends a mile and a-half from north to south, and upwards of half-a-mile from east to west, comprising three known lodes, and is but a short distance from the celebrated Old Tamar, South Hooe, and Cowes Silver-Lead Mines; its proximity to the River Tamar admitting of the ore being transportrd at a cheap rate to the principal mineral markets of the kingdom.

An adit level has been driven on the course of the lode for upwards of 70 fms., and the lode throughout being of such a highly favourable character induced the proprietor to sink an engine-shaft to a depth of 44 fms. from surface, in addition to which a level has been extended 45 fms., which has opened out a lode already producing rich silver-lead ore.

After paying for the mine, with all the new and efficient plant and machinery thereon, together with the ore at present at surface, the company will have a clear working capital of £10,000, which is considered amply sufficient to bring the mine into a dividend-paying condition.

The directors, while confidently expecting early and satisfactory dividends from the energetic development of this mine, direct particular attention to the accompanying reports of well-known mining authorities of reliable judgment, after recent and careful surveys of the property.

The mine is held on lease for a term of 21 years, subject to a dead rent of £20 per annum, merging into a royalty of 1-15th.

The only contract being for the purchase of the property is made between Wm. Harris of the one part, and James Cowell, on behalf of the company, of the other part, and dated the 12th day of January, 1875, a copy of which, with the Memorandum and Articles of Association, together with the lease, may be seen at the offices of the company, or the solicitors.

Application for shares, per form accompanying the Prospectus, to be forwarded to the bankers or to the offices of the company.

NEW NORTH TAMAR.

CERTIFICATE OF ASSAY by Messrs. Johnson, Matthey, and Co., Assayers to the Bank of England:—We have examined the sample galena, and find the following to be the result—Produce of lead 60 per cent.; silver, 68·500 ozs. per ton of 20 cwts. of ore.—London, Feb. 1, 1875.

REPORTS.

WM. SKEWIS says—"Much necessary preliminary work has been done, driving a shallow adit level and sinking trial shafts, from which some good parcels of silver-lead were got and sold. The work done, although so far somewhat limited, is very valuable for the effectual development of the mine, and cost several thousands of pounds, and, though the discoveries are not yet equal to the costs, I regard the prospects and developments of the mine to be very encouraging; such as to justify expecting success at deeper levels. This immediate district, as I before stated, has proved exceedingly rich in silver-lead ores, and very large profits have been made from the adjoining Tamar mines. This fact leads me to believe that New North Tamar will pay well for more extensive mining. New North Tamar at present is comparatively shallow, being only 44 fms. deep. The water charges are light, as well as the other general expenses. The grant is an extensive one, being a mile and a half on the course of the lodes, and 500 fms. wide affording scope for most extensive development and the deepest operations practicable."

HENRY RODDA says—"The ground about the lode is a soft clay-slate, and very congenial for the production of lead ore. In addition to the sinking of the shaft a considerable amount of underground work has been accomplished, such as the clearing, timbering, and securing of the adit level for a great number of fathoms in length, the sinking of a trial shaft and other necessary operations. During a former working of the mine some rich parcels of lead were raised and sold from the adit level, an important fact which proves the existence of mineral in the lode. There is at work a 24-in. cylinder rotary steam-engine with all the necessary appliances in connection therewith in good order, with suitable pitwork in the shaft fully adequate to the thorough draining of the mine, as well as the hauling and crushing the stuff. The lodes within the limits of this property are parallel with and a little to the north of the well-known Tamar Silver-Lead Mines, including the old South Hooe, Cowes, and other mines, which yielded such large quantities of lead and made such large profits for a great number of years. The workings so far are very shallow, and are comparatively limited. I would, therefore, recommend the sinking of the engine-shaft with all dispatch, and the driving of levels north and south therefrom, in order to prove the property as quickly as possible; and, judging from the locality and the general favourable character of the lode as seen both in the adit and in the 44 fm. level, I have every reason to believe that on the further development of the mine discoveries of rich silver-lead ore will be met with."

JOHN GOLDSWORTHY says—"The engine-shaft should be sunk with all possible speed, so that deeper levels should be extended north and south, the lode having also produced rich silver-lead ore in the north part of the mine, some of which sold for as much as 35*l.* per ton. The former workers erected a steam-engine with a view more particularly to develope this north part of the mine at deeper levels, but by the time it was ready to work their funds were exhausted, which led to the stoppage of all work, and not long after the shaft was allowed to fall together; the mine having remained idle until the commencement of the present proprietor's operations. This mine offers very great inducement, indeed great security, for the comparatively small outlay required. The heap of silver-lead ore at the surface (broken from the lode at the deepest level, it must not be forgotten) is unmistakable evidence of there being a rich mine in New North Tamar at but little greater depth than the present bottom workings. I have not a moment's hesitation in expressing my opinion that this mine will be a great and early success."

J. H. HITCHINS says—"The 44 fm. level south, which has laid open the lode as before intimated, for 45 fms. in length, has a northerly and southerly lineal course, and underlies easterly but very little, which I much like in lodes, being from 2 to 3 and 4 ft. and more in width, being quite 5 feet in the end of the level, that is to say, present furthest point of progress. Besides already producing rich silver-lead at a point in the level to be particularised, it presents a highly approvable general character, being composed of congenial capel, quartz, horn spar, and prian, also showing in places sulphur-mundic, of the right sort for silver-lead lodes, and carrying a strong flookan. At 18 fms. from the shaft is the beginning of some very lively ore ground, 7 fms. in length; the character of the lode altogether presenting unmistakable evidence of great mineral and chemical action, and of there being a regularly continuous course of rich silver-lead at little below the present workings. The more consideration I bring to bear on North Tamar, attaching due importance to the richness of its ore for silver, and its favourable relative position to the neighbouring old Tamar Mines, in the same clay-slate formation, the more firmly I hold to the opinion that it will, on being opened out in a judicious and vigorous manner, soon produce such results as will prove it to be beyond question a most valuable mine. It is, indeed, seldom that I feel such entire confidence, and so fully justified in predicting mining eventualities, as I do the success of North Tamar

* Will join the board after completion of the purchase.

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A MEETING of Certificate Holders will be HELD at the offices of the Association on THURSDAY, the 18th day of February, 1875, at Five o'clock precisely, for making two loans by ballot, free of interest, &c., and eight loans by tender of premium.

All certificates in force (*i.e.*, upon which the due instalments have been paid) will be included in the ballot, and will be eligible to tender.

Forms of Tender (to be had of the Secretary) must be sent in on or before the 13th instant, and will be opened at the meeting.

NOTICE.—The successful certificates at the Loan Meeting on the 14th ult. were—
By Ballot—Nos. 35, 212, and 617.
By Tender of Premium—Nos. 19, 20, 21, 22, 108, 109, 145, 146, 147, 148, 501, 502, and 503.

By order of the Board,
WM. T. HUXLEY, Secretary.

85, Gracechurch-street, London, E.C., February 1, 1875.

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THE GEOLOGICAL HISTORY OF SOME OF THE MOUNTAIN CHAINS AND GROUPS OF EUROPE.

The fifth lecture of Prof. RAMSAY'S course was on a further consideration of the history of the chain of the Alps, the first upheaval of which he had in his preceding lecture shown to have taken place after the deposition of the Eocene strata, and before that of the Miocene. The Miocene rocks, which compose the Rigi and other sub-Alpine mountains, are formed of conglomerates which were derived from the waste of the older Alps. These rocks after their deposition were elevated into mountain chains, about 6000 ft. high, and by the same movement the Alps were lifted up 6000 ft. higher than before. And I will now briefly show you that there are other mountain chains of Europe which underwent the same kind of elevation, both before and after the Miocene epoch, as that which characterises the Alps. Going westwards from the Alps you come to the chain of the Pyrenees, dividing France from Spain. These mountains are composed to a very large extent of such secondary strata as form the Alps. And on the northern flanks of the Pyrenees lie Tertiary strata with conglomerates, usually at low levels, and not so much disturbed as those of the Alps, yet bearing the same relation to the strata on which they lie as those of the Alps. And this proves that the Pyrenees also, like the Alps, had been upheaved into a mountain range before the middle Miocene epoch, and also that a secondary disturbance took place. Going to the eastward of the Alps to the great chain of the Caucasus, which runs from the Black Sea to the Caspian, in the same east and west direction as the Alps, there again we find, as far as the geologist can ascertain, the same story. To the largest extent the range consists of Secondary strata, and also beds of Eocene rocks, and north and south of them we have Miocene rocks comparatively little disturbed, whereas the rocks older than the Miocene are much disturbed, and carried up in one place at least to the height of 18,000 ft. In this case again, then, we have evidence of a vast mountain chain being upheaved to a great height before the commencement of the Middle Tertiary epoch; but on some of the mountains of the Caucasus (Elburz, for instance) we find signs of extinct volcanoes, but this does not interfere generally with the whole contour of the range. Returning to the Alps, we find them curving round in their west portions, and uniting with the range which traverses the length of Italy, and which is known as the Apennines: this latter range, too, shows signs of having been elevated subsequently to the Eocene and previously to the Miocene epoch—*i.e.*, they have the same geological data as the Alps. And crossing the Adriatic Sea into Turkey, into the region known as the Dinaric Alps, there we find the same evidence. And we are not even confined to Europe, for there is the same evidence with regard to the great range of the Himalayas.

At this point I am tempted to go somewhat beyond the limits of our prospectus, and give you a very brief sketch of the exceedingly interesting history of this district, especially as it is so intimately connected with the subject we have just been discussing. In very old times the portion of India lying south of the Ganges and Indus rivers formed a great tableland, rising to a considerable height above the sea, and the rocks of which it is composed are to this day very little disturbed. An able paper was lately read to the Geological Society, in which the author states his conviction that at that early period the portion of India I have just mentioned formed part of a continent which extended westward and joined itself to the continent of Africa, and continued to be so joined down to as late as the Miocene epoch at least. Further, this continent extended eastward and south-eastward, uniting itself with all the islands which now form the great East Indian Archipelago, and with Australia, which formed the southern part of the continent. This is partly proved by the similarity of geological phenomena in all these localities, and especially proved by the similarity of the living faunas of India and Africa at the present day; a great number of the species being identical in both places, which could only be by means of some such uninterrupted communication. This union commenced at least as early as the Permian epoch, and, with slight minor interruptions, it continued to the Miocene, just before which epoch the Himalayas were for the first time upheaved. The area north of the tableland of India, which I have mentioned, was then occupied by sea, in which numerous deposits, arranged in stratigraphical order, accumulated through a long lapse of geological time, and this period was closed by the upheaval of the Himalaya (and the Alps, Caucasas, Pyreenees, and Apennines) into a great mountain chain, which even now, after numerous changes, has an altitude in its highest part of about 30,000 ft. Till the upheaval of the Himalaya range the great valley of the Ganges and of the Indus had no existence, and even after this upheaval it appears that this portion of India was occupied by a gulf of the sea. The mountains having been upheaved, and again after the Miocene epoch re-upheaved, the above gulf began to get filled up by sediment carried down by the rivers and derived from the waste of the new range. The watershed between the Ganges and Indus is of no great height, only about 800 ft. At length the space between the tableland and the Himalayas was completely filled, but still the river went on pushing out its delta more and more, joining it to that of the Burrampooter; and as the result we have the modern delta, 400 miles long by 200 miles broad.

We will now return to the Alps, and look at the range, not only as we see it at present, but as it probably was in times gone by. In a paper I read before the Geological Society, about a year ago, which has not yet been published, I stated that, in my opinion, before the commencement of the Miocene epoch the Alps had been as high, or even higher, than they are now, and I will proceed to give you briefly the proofs which lead me to that conclusion. And the proofs I shall have to lay before you depend upon the principles which were long ago enunciated by Ray, the famous naturalist of the time of Charles I.; and, still earlier, by a Spanish naturalist, who states distinctly that instead of valleys being the result of dislocations, fractures, and tremendous tumults of the earth's crust, they must all have been worn out in the course of time by the action of rain and rivers, and other such agencies. The sediments deposited in the lakes of the Miocene epoch I have mentioned as being north of the chain of the Alps, has been estimated by the Swiss geologists as attaining a thickness of 8000 ft.; and all this matter was derived from the waste of the older Alps. Years before they made their estimate I had, in a much rougher way, attempted to estimate the mass of this matter, and I concluded that it was somewhere about 8000 ft. thick. But I will for our argument, and to eliminate any source of error, be content to assume that they are only half that thickness, or 4000 ft., and by only using this I will show you that they have suffered a great amount of denudation since the Miocene epoch, and also that the Alps were then as high, or higher, than they are now. If we take the area occupied by the Miocene strata between the Jura on the north and the higher Alps—the Oberland—on the south, which rise abrubtly from the plains of Switzerland, and from the Lake of Geneva on the west, to the Lake of Constance on the east, we shall have an area of about 8000 square miles. This is occupied by Miocene strata, and if we take the lowest estimate of the thickness of those strata—4000 ft.—we have there an amount of sediment of about 33 millions of millions of cubic yards, or about 6060 cubic miles. If we take the higher estimate of the thickness—8000 ft.—we shall get 12,120 cube miles of sediment. The smaller estimate, if formed into a rectangular mass, would agree with a solid mass 109 miles long, 18 broad, and 15,840 ft. high; the larger estimate would agree with a mass 109 miles long, 36 miles wide, and 15,840 ft. high. This calculation is only with respect to the Miocene strata on the north side of the Alps; on the southern side are also strata of the same geological age and general character. Thus, on the Italian side of the Alps, in the valley of the Po, Eocene strata are found, marls, sandstones, and conglomerates, evidently formed from the waste of the older Alpine mountains. Moreover, a great quantity of the Miocene strata on the southern side of the Alps has been worn away by the waters of the Po, at a comparatively late geological period, so that we may very probably, and with a great amount of justice, suppose that the Miocene rocks on the south side of the Alps

attest an amount of denudation for that side as large as we have seen took place on the northern side of the chain. If you take the chain of the high Alps, the Oberland, from Bologue to the Vaal See, you will find that a large proportion of the peaks rise above the limits of perpetual snow, which is in that latitude about 8500 ft. above the sea level, the highest point attaining an elevation of rather more than 14,000 ft. The length of the portion of the chain of which I have spoken is 126 miles, and including the high Alpine ground below the limit of perpetual snow is, roughly speaking, 32 miles wide; that gives an area of about 4000 square miles. Comparing this with our rectangular mass, 109 miles long and 36 miles broad, we have an area of 3924 square miles, with a height of over 14,000 ft., or taking the lower estimate, the same area with half the height—7500 ft. The height of the Oberland varies from 10,000 ft. to 14,000 ft. above the sea: now, if you were to take and level these mountains to a uniform height of 7500 ft. you would reduce the bulk of Switzerland by about one-third, and you would have a mass of country with an area of about 4000 square miles, 126 miles long, 32 miles wide, and 7500 ft. high. Compare these figures with those of the rectangular mass which you will reme nber represent the bulk of the Miocene strata derived from the waste of the old Alpine chain on its northern side, and you will see that the amount of material thus worn away to form the Miocene strata lying between the Oberland and the Jura would be (according to the larger estimate) twice as great as all the remaining portion of the Alps. And if we go to the south side of the Alps, into the valley of the Po, we shall find the amount of matter contained in the Miocene strata there, and derived from the Alps, to be at least equal to that on the northern side. If this be the case, the Alps must have been considerably larger and higher in those times than they now are—higher because we cannot suppose that the material was worn only from the sides; and, in fact, we know that in time the tops of the mountains are worn away. I think, then, that I have shown you sufficient grounds to justify the statement which I made at the commencement of the subject, and to show you that it is founded, not on mere guess, but on hard facts. If the calculations I have given be at all correct, they go to show that the material worn away from the pre-Miocene Alps would approximately equal the whole of the present chain.

A distinguished Italian geologist has written a paper to prove that in Miocene times great glaciers descended from the Alps into the plains of Italy. He has attempted to prove that certain hills near Turin, which consist for the most part of conglomerates, were built up by ice-borne materials. He has shown that the stones in them—which are limestone, and are now quarried for economical purposes—do not belong to the immediate neighbourhood, but have travelled from the Alps, from the region about Lago Maggiore, and he believes them to have been carried in floating icebergs, which broke off from the ends of great glaciers, into the Miocene waters. For stones are found in the conglomerates, which are covered, more or less, with these striations and glacial scratches, which everyone knows who is familiar with marine stones and the boulder drift. I myself have carefully examined these districts, and the evidence put forward, and I am convinced that the explanation given above is correct. The Miocene period was a warm epoch, it will be objected, but now with the facts before us which we have been considering, we can easily understand how if the Alps were much higher than at present large glaciers might arise in them.

ON THE INDIAN COAL FIELD.

When Mr. Walter Ness was leaving South Staffordshire to enter upon his appointment in connection with the Government collieries in Central India he promised both the South Staffordshire and East Worcestershire, and likewise the South Midland Institute of Engineers, to communicate with them from time to time as to his proceedings in his new home; and he has kept his promise. Communications from him have been received by each institute. To the South Midland he has sent a second communication, which he wrote at Warora, in the Central Presidency, on the last day of 1874, and it has just been read at a meeting of the Institute in Wolverhampton. After reminding the men of South Staffordshire that though it was his winter as well as theirs, yet as he wrote the temperature in his office was 85° Fahr., and that the mornings were chilly at 50°, Mr. Ness stated that shortly after writing the communication which he addressed to the South Staffordshire Institute, and which had been reported, he was called out on duty, and got over about 1500 miles, "not very much," he adds, "in this country." In his course he visited the celebrated marble rocks, near Jabulpur, on the Nerbudda river, and the northern boundary of the Central Provinces. These marble rocks he described, together with the surrounding scenery, which he said was all beautiful and all grand. Having sketched certain incidents associated with the natural history of the neighbourhood, Mr. Ness pointed out the leading geological characteristics of the valley. In the middle of the valley, on the south edge, and immediately under the range of hills, was the Mossanee coal field, in lease to the Nerbudda Coal and Iron Company. It was to visit these mines on behalf of the Government that he undertook the journey of 1500 miles. The author was careful in his communication not to anticipate the report which he will have to make to the Government, and gave only such particulars as might be fairly published. "The field," he said, "is of considerable extent, and the coal seams are as thick as they are at Warora, and not very widely separated by intervening measures. The four seams are of an aggregate workable thickness of coal of 39½ ft., and all can be approached and worked into from the face of the hill, at the bottom of which the Seetawara river sweeps past. From the top of the first to the bottom of the last is not over 160 ft. in all. The mines are comparatively dry, the overlying measures of sandstone forming a good roof. There is a strong conglomerate overlying the upper measures. All of these appear impervious to water, but the surface is so undulated that the rain is soon run off to the rivers below. There is no fire-damp, which is also the case at Warora. There might be a tendency to spontaneous combustion, but as this only takes place amongst loose coal it can be guarded against by taking care to leave nothing to burn in the shape of heaps of slack mixed with iron pyrites, which in forming sulphide of allumina generates heat, and, I think, often thereby gets on fire. I fancy these mines will be largely worked yet for locomotive purposes. The great Indian Peninsula Railway passes 13 miles off, but has a branch line into the mines. In reference to the quality of these coals, I may state that they are very unlike British coals. All Indian coals are very much alike in this respect, that they contain a lot of ash, and generally a good deal of moisture. The coals are leafy, and are easily impregnated with an excess of moisture when in wet positions, so that the coal in a drained field will contain less moisture than one newly opened and wet.

"To give you an idea of the similarity of these coals I subjoin a copy of several analyses I have made. From a map of India you will be able to find their relative positions from the following:—

	Latitude.				Longitude.			
Warora	20°	14′	40″	north	79°	4′	5″	east.
Pisgaon, East Berars	20	9	0	,,	78	53	25	,,
Mopanee, C.P.	22	18	0	,,	78	18	0	,,

	Warora.	Pisgaon.	Mopanee.
Volatile combustible matter	30·25	25·5	27·6
Coke { Fixed carbon	56·5	58·1	57·9
Coke { Ash (white)	13·25	16·4	14·5
	100	100	100
Moisture in coal	9·5	10·0	5·5
Sulphur in coal	0·25	not estimated	not estimated
Specific gravity	1·300	not taken	1·296
One cubic foot will weigh	81·25lbs.	,,	81·01lbs.
Number of cubic feet in 1 ton	27·5	,,	27·6

"Any apparent difference in the above is simply due to the pieces selected for the analyses. In other trials I have found the quantity of volatile more, and the fixed carbon less, but I think the above the average of all the trials I have made. I intended saying something more about Warora and the Indian coal fields generally, but I must leave doing so till another time. At present a long period is required to get machinery forward, for the roads are now scarcely deserving of the name, but this state of things will soon be numbered in the past. I am getting my machinery put together, a railway will soon be running into the works, and I hope that by this time next year I shall have the plant, as per drawing, in working order."

The drawing to which Mr. Ness referred showed the engine-house and engine, an upcast and a downcast pit shaft, and the situation and thickness of the seams of coal which the machinery was intended to work. The first seam of coal was reached at a depth of 175 ft., where the coal was 3 ft. 6 in. Before this had been come upon, yellow clay, variegated sandstone, carboniferous clay, variegated sandstone again, and a thin coal-shale had to be passed through. At 186 ft. coal of no less a thickness than 15 ft. was found with shale only between it and the upper seam. Shale, white sandstone, and then shale followed, and at a depth of 210 ft. there was a third seam of coal 11 ft. in thickness. The winding machinery was the ordinary tightened gear on the first motion, with a pair of coupled engines and a drum for a wire-rope. The conductors likewise were of wire-rope. The meeting of the Institute at which this very interesting communication was read was presided over by Mr. E. Jones, of Lilleshall, ex-president; and there were likewise present Mr. W. H. Glennie (vice-president), Mr. J. Naylor, Mr. H. Griffiths, Mr. W. Rushton, Mr. J. Briggs, Mr. Ferriday, Mr. D. W. Lees (secretary), and others.

Mr. Ness was warmly thanked for his contribution, on the motion of the Chairman, seconded by Mr. Glennie, both of whom dwelt upon the many interesting particulars which it embraced. The secretary promised to convey the motion to Mr. Ness, accompanied with a suitable letter; and the paper, illustrated with the drawing, was ordered to be printed in the next volume of the "Transactions" of the Institute.

THE BRITISH CHEMICAL TRADE—ITS PAST, PRESENT, AND FUTURE—No. II.

Both on the Tyne and in Lancashire bleaching-powder is more largely manufactured at the present time than any other chemical product, except soda crystals and soda ash. This commodity was first produced on the Tyne, at the Alkali Works of Losh, Wilson, and Bell, in 1830. It was originally made by using muriatic acid at 30° Twadell's (made in the works by retorts), and finely ground English manganese, then testing about 84 per cent. There were only two lead stills erected at first, with two chambers made of wood, and covered with pitch. Other two stills were afterwards erected, and these four were the only stills in operation for the manufacture of this product until 1843. The proportions used for a charge in 1830 were 10½ cwts. of lime, 12 cwts. of manganese, and 24 cwts. of muriatic acid. These produced about 13 cwts. of bleaching-powder, testing about 26 per cent. In 1831 the mixture was changed to 10 cwts. of manganese, 10½ cwts. of lime, 35 cwts. muriatic acid, and 7½ cwts. sulphuric acid, yielding 15½ cwts. of bleaching-powder. In 1832 the mixture was again changed to 9 cwts. manganese, 10 cwts. common salt, 9 cwts. sulphuric acid, and 10½ cwts. lime, producing 14½ cwts. of bleaching-powder. From April, 1832, salt, manganese, and sulphuric acid were exclusively used. In 1843 the plan, generally adopted until very recently, of using hydrochloric acid, obtained by condensation and manganese, was introduced; but up to this time only a small quantity of bleaching-powder had been manufactured on the Tyne—the total quantity produced in 1841 being estimated at only 370 tons—but in other places the manufacture of bleaching-powder had been carried on for many years previously. Mr. Chas. Tennant, of the well-known St. Rollox Chemical Works, in Glasgow, had commenced to manufacture bleaching-powder so far back as 1799, when the price was 1s. 6d. per lb., or 160*l.* per ton. Since then the value of this commodity has fallen to 9*l.* and 10*l.* per ton. The following tabulated statement exhibits the gradual reduction of value as the manufacture became extended, and more economical processes were introduced:—

In 1805	Per ton £120	0	0	In 1846	Per ton £	18	10	0
1810	84	0	0	1847		14	10	0
1815	80	0	0	1848		13	10	0
1820	47	0	0	1850		13	15	0
1825	27	0	0	1855		10	15	0
1830	23	0	0	1857		13	10	0
1832	21	0	0	1860		11	0	0
1835	23	0	0	1868		10	12	0
1840	21	0	0	1875		10	5	0
1843	21	0	0					

It will be observed that from 1830 the value of bleaching-powder rapidly fell, and this may easily be understood by the fact that up to that time an excise duty of 30*l.* per ton was levied upon the waste powder from bleaching-powder still, which prevented the sulphate of soda contained in the still liquids being utilised in the manufacture of alkali. Until within the last two or three years, however, every process in use for the manufacture of bleaching-powder was more or less wasteful and extravagant. It was the custom—still pursued to a large extent—to place manganese in a stone still, allow hydrochloric acid to run upon it, and obtain chlorine gas by the injection of steam. The gas was taken to chambers containing slaked lime, with which the gas combined for the purpose of forming chloride of lime; at each of these processes the manganese used was run to waste, and fresh manganese was required to repeat the operation. A ton of ore was required for each ton of powder produced, instead of re-using the manganese contained in the ore previously used. The manganese ores are found in Spain, France, Belgium, and Holland, but small quantities are found in England. Each ton of ore costs about 5*l.*, so that it became important to save the manganese as far as possible, and to this end Mr. Walter Weldon, the inventor of a process which bears his name, applied his attention so far back as 1866. Mr. Weldon carried out some of his earliest experiments with his new chlorine process at the Walker Works on the Tyne, but it had to be given up there as utterly impracticable. He then went to Lancashire, where he was allowed facilities for the due prosecution of his experiments, and these proved so successful in the long run that a company was formed for carrying the process out. Briefly stated, Mr. Weldon's process consists in the re-oxidation of the manganese, instead of allowing it to run to waste. Mr. Weldon runs the liquid into tanks, and neutralises it with lime, after which a powerful blast of air is forced into other and larger tanks, to which it is conveyed much in the same way as the blast is supplied to a smelting-furnace. It was found in numerous experiments that whereas when protoxide of manganese is treated with air in the wet way one-half is the maximum proportion of it which can thereby be converted into peroxide, the association of a certain proportion of lime with the protoxide so treated will enable the whole of it to become converted into peroxide of manganese. The following figures set forth the difference of cost between the ordinary process and that of Weldon:—

By the Native Manganese Process.						
16 cwts. of manganese, at 145s. per ton	£5	16	0			
14 cwts. of lime, at 16s.	0	11	2			
Steam	0	5	0			
Labour	0	12	6	£7	4	8
By the Weldon Process.						
25 cwts. of artificial manganite, at 12s.	£0	15	0			
27 cwts. of lime, at 16s. per ton	1	1	7			
4 cwts. of limestone, at 12s.	0	2	5			
Labour	0	10	0	£2	9	0

Between the two processes, therefore, there is a difference of nearly 5*l.* per ton in favour of Weldon's, and it is not surprising that within a few years it has almost completely superseded the native process, which until 1870 was all but universal. Mr. Weldon has calculated that a plant necessary to make 35 tons of bleaching-powder per week will cost about 2300*l.*, including the blowing-engine, the engines for pumping and agitating, and all necessary vessels and appliances.

Another well-known improvement in the manufacture of chlorine is involved in the process of Mr. Deacon, known as the catalytic process, as opposed to the regenerating process of Mr. Weldon. This process is based on the chemical reaction by which water is formed and chlorine liberated, when a mixture of hydrochloric acid gas and oxygen is sufficiently heated. In the process of Mr. Deacon (who is a partner in the Lancashire firm of Gaskell and Deacon) the manganese is entirely discarded; and instead of the hydrochloric acid from the decomposition of salt in the pan being taken to towers built for the purposes of condensation, the gases evolved from the decomposition of the salt pass from the pan throughout stoves filled with broken tiles or pieces of baked clay steeped in sulphate of copper, which separate the hydrochloric acid, and goes to form chloride of lime in the lime chambers. On the whole, it may be said that the Deacon process, although extremely ingenious, and a great improvement on any previously adopted, has not made such progress as that of Weldon.

In spite of these great economies in the manufacture of bleaching-powder, there has not during the last ten years been any considerable extension of this branch of the alkali trade. Tyneside has for many years been the chief centre of this trade, and we find from the returns of the Tyne branch of the Alkali Manufacturers' Association that the production of bleaching-powder on the Tyne has been almost stationary over the period mentioned. The statistical report of the Alkali Manufacturers' Association for the year 1866 returns the quantity of bleaching-powder made on the Tyne in that year at 27,000 tons, which at 14*l.* per ton represents a total value of 278,000*l.* In the same year the quantity of bleaching-powder made by the 20 alkali manufacturers in Lancashire connected with the association was 20,006 tons. During the period that has elapsed since that time the manufacture of bleaching-powder on the Tyne has been stationary, while in Lancashire it has not progressed in a ratio corresponding with other chemicals. It is probable, however, that during the next few years the production will show a steady advance. A time of change and revolution is not favourable to the development of industry, especially when there are several different processes, each claiming to be superior to the other, and manufacturers have been hesitating before adapting their old works and appliances to any new process until the superiority of that new process to all others had been placed beyond doubt. The demand for bleaching-powder as an article of commerce is steadily increasing, and will apparently continue to increase, so that now, when more certainty and confidence have been established out of the experiments and discoveries of recent years, we may expect to find the annual yield of bleaching-powder in the United Kingdom leap from nearly 80,000 tons per annum to double that quantity within the next decade.

SPELTER.

Spelter, in its most usual form of laminated or rolled zinc, was not known in this country until the beginning of the present century; and although now extensively used as a metal, the manufacture of which is very little understood. The first historical notice of it was by Paracelsus, in the 16th century, under the name of zinctum, but there is reason to believe that it was used long before by Asiatic nations. We now send it to the vast eastern regions of Asia Major. The Chinese use it in large quantities for their inferior coinage. The nations of India store it up as hidden treasures, not only because they think it is precious, but because its weight renders the plunder and carrying away of it difficult and dangerous; they also use it instead of money for debts and purchases. A third use to which they put it is the manufacture of idols; it is also employed for the manufacture of charms, spels, and a great variety of native offerings to the idols. These latter are thrown into the Ganges in great numbers at the annual purifications, some of which, no doubt, remain embedded in the sacred current (as it is esteemed to be), and the greater part swept into the delta of the Ganges.

Spelter, or "zinc brut," as it is generally called on the Continent, is the commercial term for zinc. The two principal materials of which it is composed are carbonate of zinc or calamine, and sulphuret of zinc or blende; a species of the latter, found very frequently, is known to the miners as "black jack," and is used for mixing with other metals, principally copper and zinc itself, for the manufacture of brass, gun metal, bell metal, and other compounds. Spelter fit for rolling is smelted chiefly from the ore called calamine, the largest mines of which are in Prussia, Silesia, and Poland, but there are also deposits in Italy, Spain, and other parts of Europe, and lately some discoveries have been made in several places along the western slopes of the Rocky Mountains.

The calamine when taken from the mine is first broken into small pieces, and freed by hand as much as possible from foreign matter; it is next deprived of its carbonic by calcining it at a red heat in a reverberating furnace, after which it is washed to get rid of the lighter earthy parts. The metallic oxide is then dried, and about 12 per cent. of charcoal is mixed with it by grinding; it is then ready for the smelting furnace, in which are a number of earthen pots and crucibles. Into the bottom of each pot an iron tube is fixed, the upper orifice of which is nearly at the top of the interior, and the lower aperture terminates just above a vessel containing water; these vessels are filled up to a level with the tubes with the prepared ore and charcoal. The covers of the crucibles are then hermetically fastened on, the fuel of the furnace ignited, and an intense heat maintained for several hours. As the metal is reduced it ascends to the top of the crucible as vapour, which, being unable to escape, is forced down the central iron tube, and passing into the water is condensed into small globules, completing the process known as "distillation by descent." The globules are afterwards melted and cast into cakes, weighing generally from 30 to 40 lbs. avoirdupois, in which state they are sent to market.

Spelter heated to 300° Fahr. becomes malleable, and may with remarkable facility be rolled into sheets. The very great expense of erecting the necessary machinery for zinc rolling makes the business virtually the monopoly of a few. The principal house in this country is the London Zinc Mill, City-road, and abroad the Silesian Company and the Joint-Stock Vieille Montagne Company. There are several smaller mills at Brooklyn, New York, United States of America.

At present the demand in France and Belgium in connection both with useful and decorative architecture is very great, and although not to the same degree as abroad, it is being brought into use for the same purposes in England, much more especially London, as a walk through the principal streets of the City and Westminster, and attentive observation of new offices and public buildings, will determine. After spelter has been subjected to a heat such as will cause water to boil, it does not return to its former brittleness, but continues soft, flexible, and extensible, and when rolled it is used for many purposes for which tin, copper, and lead are used, for which metals it is largely becoming substituted, but it is also used as a substitute; it is supplanting tiles and slates for roofing, apart from its uses in the interior of buildings; it possesses great durability, so that when laid of sufficient thickness it will serve for 30 years without requiring repair, and then be worth from one-half to two-thirds its original cost. Its chief superiority over lead is the peculiarity that the atmosphere only affects it superficially, forming an oxide on its surface which does not scale off, is impervious to rain, and acts as a coating to preserve the body of the metal, and under a hot sun, as in Australia and other warm countries where it is now used for roofing, it is well known that it cools sooner than any other metal. It is remarkable that in the Dominion, at all events in the Canadian provinces, they roof their houses with tin, which is not only less durable for such purposes than zinc, but is much more costly.

It is time that the attention of English capitalists were directed to Poland, where this metal so abounds, and where it is scarcely worked, although in Silesia its constituents are so extensively taken from their deposits. We hardly know a field of enterprise more promising for the capitalist, the investor, and the miner than the working of the Polish deposits of the elements of this metal, which is destined to find markets as extensive as the world, and to be employed in a greater variety of ways than any other except iron.

To persons interested in mining, but not much informed on the subject of metallurgy, or the commerce of metals, to architects, builders, merchants, and the immense classes in English life who are often described as "not knowing what to do with their money," this subject will, no doubt, be one of interest.

TOUGHENED GLASS.—It has long been known that when glass is heated to redness, and kept at that temperature for a considerable time, its physical properties are changed in a remarkable manner. Thus it becomes opaque, or feebly translucent, much harder and tougher, and somewhat like porcelain in appearance. This change is termed "devitrification," and is caused by the conversion of the glass into a confusedly crystalline mass, of which sections are beautiful objects when seen with a microscope in polarised light. The subject was investigatee by the renowned French philosopher, Réaumur, early in the last century: and to objects of devitrified glass the name of Réaumur's porcelain is usually applied. Such objects are exhibited in the Museum of Practical Geology, in Jermyn-street. It has been reserved for another Frenchman, a gentleman farmer, to discover the singular fact that when glass is heated to redness and then cooled or annealed in oil its toughness is greatly increased, or what is equivalent, its fragility is greatly diminished, while

its transparency remains the same. Thus, suppose a rectangular pane of glass placed flatwise and supported on two of its opposite edges to break when a given weight is allowed to fall on it—say from the height of 2 ft.—it would, after having been toughened in the manner above stated, resist the same weight falling upon it from the height of 6 or 8 ft. It is strange that, although glass has been manufactured during the last 2000 years, yet such a simple and probably very important fact as this should only recently have been found out, and equally strange that the discoverer should be a gentleman farmer. The foregoing information on the new process of toughening glass is given on the authority of Mr. C. W. Siemens, F.R.S., who is well known in connection with telegraphy and the furnace which bears his name. His brother an eminent glass maker at Dresden, has tried the process, and pronounces it to be "certain and unquestionable."

THE WORKABLE DEPTH OF COAL.

Prof. BOYD DAWKINS, F.R.S., in his inaugural address to the Manchester Geological Society, said that since the delivery of the last address two facts of considerable value in coal mining have been ascertained. It will be in the memory of those who read the report of the Coal Commission of 1871 that the limit of the depth at which coal could be worked was fixed by the temperature of the blood, or 98°, at which, according to Dr. Burdon Sanderson, labour is not practicable, except for very short intervals, in the moist air which is generally met with in mines. The evidence having shown that the question of maximum temperature under which work could be carried on in a coal mine hinges in a great measure on the hygrometric condition of the air, the Committee proceeded to enquire what was the state of the air in regard to moisture in coal mines? The observations which they collected on this point show that the air at the working faces of the coal was always humid, and often saturated with moisture. In general, however, the deepest collieries appear to be the driest, although there does not appear to be any ratio between depth and dryness. The depth at which the temperature of the earth would amount to blood heat, or 98°, is about 3000 feet. Under the long-wall system of working a difference of about 7° appears to exist between the temperature of the air and that of the strata at the working faces, and this difference represents a further depth of 420 feet, so that the depth at which the temperature of the air would, under present conditions, become equal to the heat of blood would be about 3420 feet. Beyond this point the considerations affecting increase of depth and temperature become so speculative that the Committee felt it necessary to leave the question in uncertainty, but, looking to possible expedients which the future may elicit for reducing the temperature, they considered it might fairly be assumed that a depth of at least 4000 feet might be reached. The deepest workings which afforded data in coming to this conclusion were—

The Pendleton Pit...	2214 ft. deep.
The Rosebridge Pit	2376 ,,
A colliery near Charlerol, in Belgium	2640 ,,
A colliery at St. Gilly*	3000 to 3280 ,,

The last of these had been abandoned, though not on account of the heat at that depth. Since these facts were brought before the Commissioners another Belgian mine has been successfully carried to a greater depth than any of the above. I am informed by my friend Mr. Hunt, F.R.S., that the colliery at Echelles de Simont Lambert du Charbye des Vivières was 1040 metres, or 3511 feet, about three years ago. Thus the limit of 3420 feet has been already surpassed, without, so far as I know, any unusual difficulty having arisen from the temperature of such a nature as to cause the adoption of extraordinary means of ventilation. It seems, therefore, very probable that the difficulties offered to the sinking of mines at a greater depth even than 4000 feet can be overcome by the genius of our engineers, and that by means of increased ventilation and the widening of the shafts the temperature may be reduced so as to allow coal being worked considerably below the limit chosen by the Commissioners in their estimate of the amount of coal available in this country. At all events, it is satisfactory to know that in Belgium coal is being worked now at a depth greater than any of our collieries by more than 1000 feet. [It is also interesting to note that the Prussian engineers have bored, at Sperenberg, 25 miles south of Berlin, to a depth of more than 4040 feet in the saliferous rocks, which they struck at a depth of 283 feet.]

* The evidence as to this mine is not at all complete.

THE COAL RESOURCES OF OUR COLONIES—No. I.

For some months past a series of very able articles with reference to our colonies have been in course of publication in the *Nautical Magazine*, and in the February number Mr. P. L. SIMMONDS, F.S.S., treats of the coal deposits of our colonies in a highly interesting style, although he has succeeded in compressing an enormous quantity of facts into a very small space. He remarks that one of the most important and useful of the natural productions of our colonial possessions is certainly that of coal, especially in its future relations to their material progress, and the aid they can thus afford to the parent State. As yet the vast deposits of coal in our various colonies have been scarcely developed, for only a few localities are at all extensively worked. It is a fortunate circumstance that, with few exceptions, wherever important British colonies have been founded there has also been found a local supply of coal; thus the colonists of that race which, above all others, has attained great national prosperity by means of its vast mineral wealth find in their new countries the same agents whereby to build up a like greatness.

Starting from England, the first considerable supply of coal we come to is on the very nearest part of the coast of North America, and this is on British soil. The island promontory of Cape Breton, stretching out towards us into the Atlantic Ocean, teems with bituminous coal of excellent quality; seam above seam crops out on the face of the cliffs to an aggregate depth of about 150 ft., several of the seams being from 6 to 8 ft. thick, one 39 ft. thick, and another 22 ft. A little further to the west highly bituminous coal is found at Pictou, and at the head of the Bay of Fundy, stretching across the narrow neck of land to the Gulf of St. Lawrence. The supply of this coal field is, without doubt, enormous; its importance cannot be exaggerated, and its advantages are threefold. It opens out on a bold coast, abounding in harbours, on the very nearest portion of the American seaboard. It is close to our naval arsenal of Halifax, "the western sentinel of the Atlantic," and it renders easy of achievement and of maintenance the great intercolonial railway, which is destined to bind together, in material intercourse, the several States of the Dominion already associated in a political union. It is probable that NOVA SCOTIA, in proportion to its extent, stands unrivalled in the productive capabilities of its coal fields. In 1851 only 115,000 chaldrons of coal were raised in the province; in 1872 the quantity raised was 881,000 tons, and the average number of persons employed in the collieries was 3522. Nova Scotia coal now sells at remunerative prices in several markets hitherto altogether supplied from Great Britain. As regards the steam coal, in a few cases, determinations of sulphur have been made; but from this impurity the greater part of the coals now worked in the Pictou region is quite free. One point of difference between the Welsh steam coal and the Pictou coal is this—whereas the former gives a larger amount per ton of steam evaporating power, it also gives a larger amount of sulphur, causing a clinker, which adheres and eats the bars of the furnace; whereas the latter, with a less amount of steam-producing power, contains hardly any sulpher, but makes a large amount of ash. For fuller information on this branch of the subject, a "Report on the Coals of Pictou County," by Mr. Edward Huntley, F.G.S., may be consulted.

Most of the albertite and other coal of New Brunswick is consumed in the Province, and only a few thousand tons are exported annually. Coal is also supposed, with good reason, to exist on the western shore of Prince Edward Island. The carboniferous system appears on the opposite coast of Newfoundland. The Governor of that colony, in a recent official report to the Colonial Office, states the fact that coal exists over a large area on the western side of the island, has been ascertained beyond a doubt, and this must be reckoned as a valuable discovery. In 1868 Prof. Bell, of Canada, visited the neighbourhood of St. George's Bay, and found a fine workable seam of coal. Mr. Murray, the island geologist, calculates that the area of this solitary seam, even supposing there were no others to be found, is 38 square miles, and allowing a thickness of 3 feet there would be 54,720,000 chaldrons of coal. It is not to be supposed that the whole of this is accessible, but there can be no doubt that most of it is within working depth. The proximity of this splendid coal field to Canada, and the facilities it presents for coaling passing steamers, need not be dwelt on. Governor Hill adds—"That during the past few years, proofs as to the existence of valuable mineral deposits have multiplied so rapidly that there are not unreasonable grounds on which to base an affirmation that the island is destined to become one of the world's great mining regions." From the reports of Professor Dawson, and other eminent geologists, it is evident that we have such a supply of coal in Nova Scotia as must give us the rule of the western side of the Atlantic. Holding the eastern and the western sides, then, we may consider the Atlantic safe.

Going into the interior, we next come to the coal fields in the Rocky Mountains. These are, however, but little explored as yet. Crossing the mountains again, we arrive at VANCOUVER ISLAND. Here too, we have coal fields of the richest quality. Coal seams are exposed in more than a dozen different places on the east coast of Vancouver. About five miles from the shore, on the south-west side of Comox Harbour, there is an almost perpendicular cliff, where there are four coal seams, 4 ft. 6 in., 5 ft. 4 in., and 10 ft. in depth. Coal seams, said to resemble these, occur at no very great distance in a north-west direction; still further north-west, 16 miles from Comox Harbour, and close upon the coast, there is a 4-feet coal seam. Coal seams are found in a number of other places both south-east and south-west of Comox Harbour. The general trough seems to be divided into two distinct basins: the Comox Basin between Cape Mudge and North-West Bay, 64 miles in length, with an average breadth of 7 miles, exclusive of what may be under waters. The productive area can be safely considered, at least, 300 square miles. Following the rules applied to coal fields in South Wales, the Union Mine at Comox alone would yield 16,000,000 tons per square mile, and the Baynes Sound Mine 7,680,000 tons. The other mines of this district have not been sufficiently examined to make any calculations of the yield.

The second, or Nanaimo Basin, is about 16 miles long, with an average breadth of 6 miles. It is probable the seams will be found to extend still further to the S.E. The seams occur in varying thicknesses, from an inch to 9 ft. The total thickness of the coal measures in the Nanaimo coal fields may be safely estimated at 2500 ft. The Vancouver Island Coal Company are working two beds of 6 and 7 ft. respectively at Nanaimo. Their workings were commenced some 20 years ago, and have been regularly continued, giving now about 40,000 tons a-year. The area of the Nanaimo coal field is upwards of 90 square miles. The existence of a fine quality of coal on the seaboard cannot fail to be of the very greatest importance when the Canadian Pacific Railway converts British Columbia into one of the world's highways. By that time at least three trans-continental railways will connect on the Pacific coast with lines of coasting and ocean steamers, which will get steam coal from the only North Pacific district that can supply it—Vancouver Island. The effect also of a supply of coal on local manufacturing industry cannot be overlooked as an element of future supremacy. The coal fields in the Nasse-Skina district have not been carefully examined yet. Anthracite coal is found in Queen Charlotte Island, which would be of immense value to the whole Pacific coast could it be worked profitably.

TRACTION ENGINES ON COMMON ROADS.

At the Montgomeryshire Petty Sessions, Messrs. William Yelland and Wm. Boustred, of Pontesbury, were charged for that they "on Jan. 22, at the parish of Montgomery, in the county aforesaid, did use on a certain turnpike road leading from Montgomery to Chirbury a locomotive propelled by steam, the wheels of which were not cylindrical and smooth soled, or used with slides or other bearing surface of a width of not less than 9 in." Mr. G. D. Harrison, Welshpool, was for the prosecution, and Mr. R. Prall, of Rochester, and Mr. Henry Morris, of Shrewsbury, were for the defence.

MR. HARRISON said that the intention of the Act of Parliament was that the wheels must not only have a bearing surface of not less than 9 in., but must also be smooth soled, and this the wheels of the defendants' locomotive would unquestionably be shown not to be.——GEORGE FARMER, surveyor of the road, said: I know the locomotive in question, I saw it on the road on Jan. 22, it was then working on the Chirbury road, but in Montgomery parish. I measured the wheels on Jan. 27, having, when I first saw them, felt satisfied they were not right. I produce two models, one of the front and one of the back wheels, which are correctly made from my measurements. I measured from tire to tire, and from one edge to the other in the leading wheels was 8½ in. There is a rib, as shown, 5 in. wide and nearly ½ in. thick. When the wheel revolves there cannot be more than that on a smooth hard surface; when it sinks into the ground there would be more. There is a great difference between the leading and driving wheels. The driving wheels are 15 in. from edge to edge; they are not smooth soled. That is correct for a portion of the wheel. The diagonal bars are not fixed on regularly, but that is a fair representation of the wheel. Recently there has been an alteration in the form of the wheel. There cannot be a continuous smooth bearing surface of not less than 9 in.——Mr. PRALL said the Act said "or other bearing" surface, but did not say anything about it being smooth. The words "cylindrical or smooth soled" were disjoined from the words "bearing a surface, and not less than 9 in." by the conjunction nor, and the Act meant that either would do.

The CHAIRMAN said that the bearing surface must be smooth, or a cog-wheel might be used.——WITNESS: I did not examine the track immediately after the engine passed, as it was over loose stones, and it would have been of no use to do so.——Cross-examined: This information is laid by order of the trustees. I have seen many of these engines. There is a 9-in. bearing surface, but not smooth nor continuous. If the road were perfectly hard and were rounded, there would not be a continuous bearing surface of 9 inches if the wheels were cylindrical and smooth soled. It would be the tendency of such a wheel, if the road were soft, to sink in, but such a wheel would not have more tendency to do so than the wheel of the traction engine in question. The object of the space is to give the wheel a greater hold upon the road. I have seen in time of frost the engine unable to go on for want of hold. I have seen the leading wheels quite off the ground in struggling up hill. These pieces have been put in since the last information. I believe the engine could not go without the grip. The diagonal bars crossing the wheel are 3 in. wide. The space between them 2½ in. The pieces which have been inserted in these spaces since the conviction some time ago are 9½ in. long by 2½. Two ribs and the space filled up make 8½ in., but there would not be much above an inch bearing on a perfectly smooth surface. The engine at the time I saw it was drawing barytes. The spaces leave cogs of mud on the road.

MR. PRALL explained that he had come from Rochester to defend the case, not because of any particular ability of his, but because Messrs. Aveling and Porter, of Rochester, who were one of the largest makers of these engines, had desired him to do so on account of his having been concerned in several cases with regard to traction engines. He deprecated any technical points being laid hold of to get a conviction, and asked the Bench, in considering the case, to take into account the difficulties which the makers had to meet and contend. It was the earnest wish of Messrs. Aveling and Porter, and Messrs. Fowler and Co., of Leeds—one of the partners in which the latter firm was present—to comply in every way with the requirements of the Act, and they believed that the wheels in question so complied. The wheels could easily be made cylindrical and smooth soled, but more damage would be done to the roads than at present. No doubt the leading wheel was not 9 in., and technically the defendants might be convicted upon this, but the Bench should consider that much was here left to the discretion of the magistrates. If they liked they could, he dared say, drive traction engines out of the district, but they should consider that by similarly insisting that every locomotive should consume its own smoke they could stop all locomotives. In Cornwall, where a similar case had been tried, the magistrates had, on a plan having been put in, and an explanation given, dismissed the summons.

Mr. ROBERT EDDISON, a member of the firm of Fowler and Co., Leeds, said—We make from 200 to 300 traction engines a year generally, about 40 or 50 of them being road engines. Messrs. Aveling make more than we do, but no steam-plough engines. What applies to one engine would apply to the other. We consult as regards the wheels, and every maker has now adopted this form. In our opinion and that of mechanics generally it complies with the Act. Messrs. Clayton and Shuttleworth make them also generally in the same form—it is 8¾ in. across the two ribs, and one space filled up. The bearing surface taken anywhere of that wheel is frequently 16 in., and never less than 9½ or 10 in. You must take it that way—it would otherwise be absurd, for if perfectly cylindrical and revolving on a hard smooth surface, the bearing surface of the wheel would be a line.

The CHAIRMAN: It ought to have 9 in. slippers.——WITNESS: That would be an impracticable thing to make. We have nothing of the kind in use. Slippers of the kind you mean were formerly used, but of late years they have been given up; this is the only wheel we make. A smooth soled wheel would practically damage the road a great deal more than this does. This wheel moves on, but the smooth soled wheel stops, and there is nothing to prevent a man putting a stone or anything else under it in order to get the engine on.

The CHAIRMAN: But the man could be prevented putting stones on the road.—Witness: He could be prevented leaving them on, but not putting them on and taking them off again. Farmers in our neighbourhood, where there are good stone roads, ask us frequently to come over and roll their roads for them. I consider this wheel the best form there is. I should have defended the wheel before the spaces were partially filled up, as I consider it had then sufficient bearing surface. The weight of the engine—10 tons—is mainly on the driving (or hind) wheels. There is only about 2 tons 5 cwts. of this weight on the leading or steering wheels.—Cross-examined: I have not gone over the whole distance traversed by the engine, but I have seen the track, and have not seen the slightest harm done to the road, and where new stone is laid it is rather improved than otherwise. The track is perfectly smooth, except where the mud is squeezed up. The road is soft and muddy. Nine inches of the hind wheel in breadth are actually in contact with the ground.—This closed the defence.

The Court was then cleared, and when, after a few minutes absence, the public were re-admitted, the CHAIRMAN said: We have given this matter our very best consideration, and are unanimously of opinion that the front wheels do not conform to the terms of the Act of Parliament, and we give no decision as to the driving wheels. Considering that the engine was drawn upon the road some four or five days after the previous conviction, we do not feel it our duty to lessen the penalty, and we fine you 5*l.*, costs to follow.—We were informed that Messrs. Yelland and Boustred would at once take steps to make the leading wheels conform with the requirements of the Act.

Registration of New Companies.

The following joint-stock companies have been duly registered:—

LLANRHAIADR LEAD MINING COMPANY (Limited).—Capital 50,000*l.*, in 2*l.* shares. To carry out an agreement made between Joseph Taylor, of 81, London Wall, and W. Eaton, of New Wandsworth, for the purchase by the said W. Eaton, on behalf of the company, of the Craig-y-Mwyn Mine, in the county of Montgomery. The sum to be paid for the property is 20,000*l.*, half in cash, and half in fully paid-up shares. The shareholders of the late East Llangynog Lead Mining Company (Limited) are to take the first offer of the shares at a discount of 25 per cent. The subscribers (who take one share each) are—Joseph Taylor, 86, London Wall, accountant; T. R. Clarke, Geneva-road, Brixton, accountant; E. Hilton, Horsmonden, Kent, gentleman; J. Meguin, South King-street, Manchester, accountant; J. Denton, Leeds, merchant; J. Nasmith, Plymouth-square, Manchester, engineer; J. Lees, Grosvenor Park, estate agent. Messrs. E. Hilton, Joseph Taylor, John Denton, J. Nasmith, and J. Meguin will be the first directors, their qualification being 400 shares.

UNITED MINES COMPANY (Limited).—Capital 25,000*l.*, in 10*l.* shares. To acquire certain mining properties known as Acqui Resi, Guttura Palla, and San Giovedda, in the Island of Sardinia, and Ballabio Laorca, and Rossiga, in the province of Como, North Italy. There are 15 subscribers to the Articles of Association, the first eight being George Wythes, Bickley Park, contractor, 450; J. Perry, C.E., 103, Cannon-street, 50; W. J. Kinsbury, C.E., 1, Blandford-square, N.W., 50; D. Webster, Norfolk-road, St. John's Wood, no occupation' 50; C. E. di Kiez Routke, C.E., 7, Collingham-road, W., 25; E. Blount, Paris, banker, 200; A. M. Tapt, 4, Great George-street; Thomas Brassey, M.P., 4, Great George-street. The first directors will be—Messrs. George Henfrey, of Lerice, Italy; W. J. Kingsbury, 1, Blandford-square, W.; W. J. Cuttrill, 103, Cannon-street; A. M. Tapt, Great George-street, S.W.; D. Webster, 14, Norfolk-road; U. de Lungo, Cannon-street; J. Perry, Clifton-square.

MILITARY AND NAVAL SUPPLY AND PERFECT GUARANTEE COMPANY (Limited).—Capital 50,000*l.*, in 5*l.* shares. To carry on business as wholesale and retail merchants, and to secure money on deposit, &c. The subscribers (who take one share each) are—G. W. H. Rance, Cambridge; P. Reiny, 57, Bishopgate-street; F. E. Perkin, Park Villas, East Richmond; T. H. S. George, Army and Navy Club, Pall Mall; J. Wright, C.E., St. James, Eccles, Manchester; and F. Leech, Hastings.

LOIRE AND THAMES TRANSIT COMPANY (Limited).—Capital 80,000*l.*, in 20*l.* shares. To acquire the business of Messrs. T. M. Duché and Sons, carriers and agents for the shipment of goods between London and St. Nazane. The subscribers (who take one share each) are—J. Mead, St. Dunstan's Buildings, St. Dunstan's Hill; J. N. Bishop, 41, Crutchedfriars; C. Duché, 150, Fenchurch-street; E. Chevassus, 106 and 108, Old-street, E.C.; J. Weatherley, St. Dunstan's Buildings; M. Duché, 15, Fenchurch-street; W. S. Vorley, 248, Camden-road.

HYAM AND CO. (Limited).—Capital 150,000*l.*, in 20*l.* shares. To acquire the business of Messrs. Hyam and Co., of Oxford-street, outfitters, &c. The subscribers (who take one share each) are—S. Hyam, Oxford-street; A. Hyam, Oxford-street; Robert Hyam, Oxford-street; M. Bensusan, Oak View, Anerley; M. De Pass, 23, Norfolk-square, Hyde Park; A. D. Lewis, 22, Pembroke Villas, Bayswater; J. J. Pelling, 75, Carlton Hill.

COWAN PATENTS COMPANY (Limited).—Capital 60,000*l.*, in 5*l.* shares. To acquire and work patents granted to Andrew Wanchope and John Cowan for improvements in the manufacture of gas. The subscribers (who take one share each) are—A. Huyshe, 46, Onslow-square; E. H. Hewett, 36, Oakley-street, S.W.; Robert N. R. Swanmore, Bishops Waltham, Hants; J. Cowan, Queen Adelaide-road, Penge; E. W. Layton, 4, Lothbury; L. G. Murray, Whitehall-place; and H. N. Sulivan, Royal Parade, Blackheath.

HALE'S ROCKET COMPANY (Limited).—Capital 25,000*l.*, in 10*l.* shares. To acquire patents for improvements in rockets for carrying lines to standing vessels, and a war rocket apparatus. The subscribers are—F. Cox, Lorn-road, Brixton, 25; J. S. Hooper, Kilburn Lodge, Guernsey, 50; F. A. P. Pigou, Dartford, 30; Donald Campbell, 4, Skinner's-place, E.C., 25; J. L. Hadley, City Flour Mills, 50; J. Macdonald, Kingston-on-Thames, 1; and W. Blott, 251, High Holborn, 100.

WHITE ASH PAPER COMPANY (Limited).—Capital 25,000*l.* in 5*l.* shares. To carry on the manufacture of paper near Accrington.

BANKSIDE SPINNING COMPANY (Limited).—Capital, 15,000*l.* in 5*l.* shares. To carry on business at Oldham.

UNIVERSAL FUEL ECONOMISING COMPANY (Limited).—Capital 30,000*l.*, in 10*l.* shares. To acquire inventions for an improved feed-water heater and fuel economiser. The subscribers (who take one share each) are—J. Kennerley, Birkenhead; G. H. Knight, Radley Lodge, Reigate; H. Dobson, South Castle-street, Liverpool; Thomas William, Montgomery; F. A. Richmond, Seacombe, Cheshire; W Pearse, 3, Bold-place, Liverpool; and E. Towler, Liverpool.

CAMBRIDGE MILL COMPANY (Limited).—Capital 25,000*l.* in 5*l.* shares. To carry on business as cotton spinners at Oldham. The subscribers (all of Oldham, who take one share each) are—G. Newton, R. Buckley, S. Johnson, H. H. Mellahen, J. Howarth, J. T. Jackson, and J. Kenworthy.

HENSHAW-STREET SPINNING COMPANY (Limited).—Capital 50,000*l.*, in 5*l.* shares. This is an Oldham cotton spinning company. The subscribers (who reside at Oldham, and take one share each) are—H. Warremmer, T. Weeder, J. Greaves, J. E. Thompson, W. Holt, R. Buckley, and W. Kelsall.

JAMES CARRUTHERS AND COMPANY (Limited).—Capital 25,000*l.*, in 100*l.* shares. To take over a business at Gorton, Manchester.

CHEMICAL NOTES.—It is worth recording that Dr. Harrington, Chemist to the Geological Survey of Canada, has recently described a new mineral species which presents a remarkable chemical constitution, inasmuch as it appears from the analyses to be a hydrous carbonate of alumina, lime, and soda. The existence of an artificial carbonate of alumina is extremely doubtful, but it should not be forgotten that many years ago a mineral from Hove, near Brighton, was described by Messrs. J. H. and G. Gladstone, under the name of Hovite, and that these chemists then suggested that their specimen might be a carbonate of alumina and lime. The Canadian mineral may have a similar constitution, or it may be merely a compound of hydrate of alumina with the carbonates of lime and soda. This new species was found at M'Gill College, Montreal, and has received the name of *Dawsonite*, after the distinguished Principal of the College,

It seems likely that some recent experiments by Mr. W. Skey, the Chemist to the Geological Survey of New Zealand, may throw light upon that much-vexed question—the origin and constitution of the celebrated torbanite, or Torbane Hill mineral. In prosecuting some researches on the absorption of petroleum by clay, Mr. Skey obtained a product that strikingly resembled the natural substance. He believes that if petroleum percolated through a bed of clay, the argillaceous matter would abstract certain constituents from the petroleum, and thus produce, if the action were not long continued, an ordinary bituminous shale; but if the process proceeded until the clay were saturated, a mineral substance like torbanite would be obtained. It is not that the clay merely absorbs mechanically some of the constituents of the petroleum, but Mr. Skey believes that a true chemical action is set up, and that the resulting substance is a combination of a hydrocarbon with silicate of alumina. This conclusion corroborates the view that torbanite is in no sense entitled to be classed as a coal. Mr. Skey's result will be found in a paper published in a recent number of the *Chemical News*.

An interesting collection of stone-mining tools, discovered last year at Alderley Edge, in Cheshire, has recently been exhibited before the Literary and Philosophical Society of Manchester, by Prof. Boyd Dawkins. The tools, which are chiefly hammers formed of stone boulders, appear to have been used in working the copper ores of this locality. It is difficult to determine the precise period at which they were in use, but it appears safe to carry their date back to pre-Roman times, and thus to class them among pre-historic relics—*Athenæum*.

EPPS'S COCOA—GRATEFUL AND COMFORTING.—"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected cocoa, Mr. Epps has provided our breakfast tables with a delicately flavoured beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—*Civil Service Gazette*.

FOREIGN MINES.

DON PEDRO.—Telegram from Rio, Feb. 7: Produce cleaned up, 4600 oits.; estimated produce for January, 6300 oits. The No. 8 shoot has been intersected in the 35 fm. cross-cut.

MINERAL HILL.—Mr. Oakes, the superintendent (Jan. 18), writes—The exploratiens continue without change. The ore raised during the week is 40 tons, of an average grade of $50 per ton.

RICHMOND CONSOLIDATED.—Cablegram from the mine at Eureka Nevada: Hall, London: Week's run, $45,000.

COLORADO TERRIBLE LODE.—Feb. 8: The agents advices to hand this morning are dated Jan 15. Sales of ore:—

To W. Church	7 tons 1463 lbs.	..... assay	210½ ozs.	$1496·44
Hall and Co.	10 ,,	36 ,, ...	432 ,, ...	4523·19
Paid in cash				$6019·63

Deliveries for week:—To W. Church, 10 tons 1600 lbs. second-class ore; Hall and Co., 3 tons 1260 lbs. first-class ore. The weather during the week has been very bad, a continual snow-storm coming from the east. The roads are so heavy that teaming is almost stopped at the mine; all is going on in the usual way. The weekly report of the mine foreman details the condition of the several workings, all of which are in good ore.

GOLD RUN.—J. A. Stone, Jan. 23: I measured the tunnel this morning, and found it 203 ft. 6 in. They encountered great quantities of water, which they think retarded the work at least 10 ft. The foreman told me if they had no bad luck the remainder of this mouth they would fetch it up to 125 ft. for the month.

EXCHEQUER (Gold and Silver).—Lewis Chalmers, Jan. 18: You will be glad to hear that the men I have had rising from the 100 ft. level from engine shaft to the bottom of the winze made the connection on Saturday—a very important piece of work for ventilation of the lower levels, as it saves pumpwork and steam, and affords two means of ingress and egress for the miners. It will take them this week to complete their timbering. This done, if I have any encouragement from home, I shall commence sinking to the 200. Wood was coming down the shoot until the late storm at the rate of 8 cords per day, at a cost of $150 per cord, a cord of wood being 8 ft. long by 4 ft. high, and 4 ft. wide. Today we have 10 to 12 ft. of snow at the mine, and about 4 ft. at the mill.

ALMADA AND TIRITO.—The Andreklos and Memnon have arrived respectively at Bremen and Liverpool, containing together about 210 tons English, of the estimated value of 5500*l*. A bill of lading for 14,000 Mexican dollars has been received, and they are expected to arrive by the Royal mail steamer on Feb. 15. In addition to the above ores, 67½ tons American have been shipped by the Pacha, and 630 tons American are awaiting shipment in Mexico.

LONDON AND CALIFORNIA.—Telegram received from the San Francisco agents: Amador total receipts amount to $20,800; total expenses, $7500; ore crushed, 640 tons. We remit 2000*l*. Prospects are very encouraging at second level, north of Prospect shaft; but it is too soon yet to place much value upon it.

INDEPENDENCE (Gold).—The January clean-up, advices of which were received by cable on the 9th inst., took place on the 18th of the month, owing to the flume being injured by heavy storms. The produce for the last 18 days was $2750, and the working expenses, through the flooding of the mine, amounted to $4500. $1000 was also spent on capital account. The cable, however, announced that the flume had been repaired, the mine cleared of water, and the mill re-started on Jan. 25. Writing on Jan. 18, from San Francisco, Prof. Price, the company's financial agent, states that he had received a sample of the pay streak found in cross cut in bottom of shaft, and that it was by far the best quartz they had ever seen from the mine, and, after removing the visible gold, yielded on assay $149·98 per ton. He adds that although it is impossible at present to form any idea of what quantity of such quartz there may be, such a sample generaliy indicates an extensive body of pay ore.

BATTLE MOUNTAIN.—Capt. Richards, Jan. 14: Very good progress is being made in driving the 260 ft. level, north of the new shaft; the communication of this drift with Stevens' winze was effected satisfactorily, and noticed in last week's reports; the ventilation is considerably improved thereby, which is always a most important feature to be attended to, in this mine. Men are engaged in enlarging the plat at the 260 in the new shaft, for the purpose of being able to resume the sinking thereof as early as possible. I expect by the time this is ready four men will be relieved from the 260 north by holing it with the 260 drift, south of Cook's winze, who will be placed to sink the new shaft below the 260, which I am glad to find is entirely approved of by you. In Smith's winze sinking below the 260 ft. level (the said winze being about 16 ft. south of where Cook's winze came down from the 188), the lode is of a very promising character, composed of gossan, iron pyrites, and some goo l quality copper ore, in red oxide, green and blue carbonates. The lode in the stope in back of the 260 ft. level, north of Cook's winze, is not so productive of ore. The lode in the stopes in back of the 260, south of Cook's winze, has produced less ore this week, a falling off which I hope is only temporary. The ledge still assumes a very strong appearance.

—Capt. Richards, Jan. 21: In driving in the 260 ft. level, north of the new shaft, very good progress has been made, and a communication has been effected with the 260, south of Cook's winze; this has relieved the stope in the back of the 260 of foul air, and caused good ventilation in this, as well as Smith's winze sinking in the bottom thereof. As soon as the ground has been squared at the point of holing tramroad will be laid, and this will enable us to put the stuff direct to the shaft therefrom, instead of hoisting it by manual labour through Cook's winze; it will also relieve four men, who will as soon as we can complete plat be placed to sink the new shaft below the 260 ft. level, and which will be forced with all speed. In Smith's winze I have the pleasure to report a very strong lode, which has produced more ore this week; the ledge is large and hard, but the ore is of good quality, in red oxide, green and blue carbonates, the latter in spots only; depth sunk 20 feet. In the stopes in the back of the 260 ft. level, north of new shaft, south of Cook's winze, the lode has improved, the barren piece of ground proving only of a temporary character; the lode produces rich ores in red oxide mixed with green carbonate, and spots of blue carbonate—a very promising looking ledge. The enlargement of the plat is progressing very satisfactorily, and it seems to be all ledge matter so far as we have cut in, about 10 ft.; some good spots of galena ore have been met with, and so far as I can judge it looks as if our ledge at this point gets larger as we deepen the mine. We raised 300 sacks during the week.

NORTH AMERICA (Gold).—The following copy has been received from Mr. Morgan of a letter dated Dec. 22, the original of which was lost in the post:—"For the week ending on the 19th inst. the production of the mine was 1853 loads of gravel, and the labonr account for the same time was $1065. The cold weather of late has dried up the water so much that we are unable to wash gravel in the yard. For the week only about 1600 loads were washed. It was so cold that the flumes filled with ice, and only the upper section could be cleaned up, from which was obtained 88 ozs. of gold. The ground washed has paid very well, as there must yet remain in the flume and ground sluice at least 200zs. more gold. The greater part of the gravel came from the old ground and from the Evans's drift; excepting in the drifts in head of tunnel where the air is too poor to do much. Work in all parts of the mine is progressing well. The new air shaft is going up rapidly, continuing in good working ground; it is expected to have it completed by 1st prox. The weather at present does not indicate either snow or rain, but I shall look for a change soon, and hope for rain, which will give us water for further washing. This week and next being holiday time, I expect our working force will be much broken; the Chinese will doubtless work on. We are steadily increasing our force of Chinese, and have already a most excellent lot of this class, probably as good as is to be found at any other mine in the State." The following telegram has been received, dated Jan. 30:—Terrific storm, washing again, prospects excellent.

—D. W. C. Morgan, Jan. 14: For the two weeks ending the 2d inst. the output of the mine was 3412 loads of pay stuff. The labour expense for the same period was $2209. Being the holiday time many of our white hands worked only a part of the time, but the Chinese force worked on steadily. The new air shaft was completed at midnight on the 2d inst.; its depth from the surface to the bed-rock is 337 ft. It is a great improvement, the mine will now have a good circulation of air through all parts and at all times. The weather has continued cold, and no rain and but little snow has fallen. Water for washing in the yard is no longer at hand, the cold north wind having dried it up. We were able to thoroughly clean the lower section of flume, and also the ground sluice, from which was obtained 88 ozs. of gold; this, with 88 ozs. from last washing, has been sent to the mint. I am somewhat disappointed that there has not been more rain fall in December to keep up the supply of water for continuous washing, however the water we have had has benefited us very much. Underground the work is progressing finely. For the month of December 350 ft. of drift was completed. More would have been accomplished had there not been so much hindrance on account of bad air. No. 1 north sub-drift will soon connect with No. 4 main drift. No. 2 sub-north has nearly crossed the depression in the rock, and will now go ahead much faster. No. 3 sub north has been started; the ground on this side is yet quite wet, but it must drain out rapidly with so many openings run into it. The gravel looks well, and numerous special tests show it to be of good quality. On the south side Nos. 2 and 3 sub-drifts have run into a stratum of sand and clay next to the bed-rock, and the heavy "wash" of gravel lays high above. These drifts will be stopped for the present, or until the main No. 5 south drift has been pushed ahead some distance to explore the ground. No. 5 south seems to be in a more difficult character of rock to deal with than anything we have before met in this mine; it is what is known as swelling rock, ahd great difficulty is found in keeping the supporting timbers in position. I hope we may not have much of this kind of rock. Evans's drift is being run ahead, and promises to open a very extensive area of very good ground, which carries no water. Due diligence is being used to get at as many breasts as possible to open, so as to further increase the breasting force when the spring water season commences. Everything is working smoothly and well, and with good water season I am certain you will not be disappointed in the returns. In reference to the prospects for a good water season, I will say that although the body of snow on the ground is very light we are yet likely to have very severe storms, and the ground being thoroughly saturated we may look for a full head of water a month earlier than usual. Due caution will be used to prevent the ditches from filling with ice. There have been some light falls of snow lately, and indications are favourable for either snow or rain again soon. With a few hours rain on the fresh snow we shall be again able to do some washing.

CAPE COPPER.—Ookiep, Capt. Tonkin, Dec. 31: The mine has been kept thoroughly drained to the bottom during the month, and the shaftmen have been engaged in cutting plats, making room for cistern, &c. At present we are fixing timber for the skip-road, and in the course of a short time we shall be in a position to haul stuff from the 80. The 68, east from No. 13 winze, fluctuated very much in value during the past month, at one time it became entirely unproductive; now, however, it has again improved, and the present end of the driving will yield from 4 to 5 tons per fathom. The 68, south from No. 15 winze, has not materially changed since last reported; we have some good branches of ore in the end, which we hope will lead us to something more valuable very soon. The end driving north from No. 15 winze, at the 68, is quite unproductive in the forebreast, but there is a good bunch of ore in the very bottom of the level close to the present end, which is undoubtedly a good indication for the deep level that will be driven under this point. The stopes throughout the mine have only undergone the usual fluctuations, and, on the whole, they continue to look well. I may notice that the stope in the 68, south-east from No. 13 winze, continues very rich. Just now we are busily engaged in fixing air-cylinders, pipes, &c., for the underground boiling machine, and the engineer has almost completed the erection of new engine which was sent out for the dressing-floors, so that I hope shortly to be in a position to start the machine to work, and judging by its appearance, I shall be much disappointed if we do not find it to answer our purposes very well. In the ore-dressing department we are getting on much the same as for some time past, but we are taking advantage of the good supply of native labour to dress a large quantity of low-class surface reserves:—The quantity of ore dressed during the past month is as follows:—750 tons from the mine, 150 tons surface reserves.—Spectakel: Capt. Tonkin, Capt. Lanksbury, Dec. 23: There is no favourable change worth noticing in any of the stopes throughout the mine. We are working on the best piece of ground that we can find, but the places are so poor that we cannot by any means make satisfactory returns. At present we are carrying out a trial level from the bottom of incline east of the flookan course, but the ground is quite unproductive. The yield from the mine for the past month was 26 tons, the other 10 tons were taken from the surface reserves.—Trial Mines, Capt. Tonkin, Dec. 15: The 10, at Karolusberg, has not changed since last reported. The level continues to yield some good stones of copper ore, but the quantity is very small. We are preparing to sink the shaft below the 10, and in cutting ground for the cistern we took out some good stones of copper ore from the deepest point. The level from bottom of stope at Kilduncan is looking much the same as when last reported; we had a small branch of copper ore in the end, which will assay about 24 per cent., but there is not enough to value. From the winze at Narrap Mine we have lately taken stones of ore which assayed from 2 to 25 per cent., but the quantity is small. In consequence of the difficulty in ventilating the lower working, I think it will be well to fix a mule machine to draw stuff from the mine, then deepen the main shaft for another 10 fm. level, in order to drive out under all the present workings; by doing this we shall not only ventilate the mine, but also give it a good trial in depth.—Returns for December: Ookiep, 860 tons of 30 per cent.; Spectakel, 33 tons of 31 per cent. Railway traffic for four weeks ending Dec. 26, 289 tons up and 710 tons down.—Bills of Lading Received: 171 tons of ore per Anglian (s.), 410 tons per Corsair, 340 tons per Alton, 200 tons per European, (s.), and 220 tons per Danube (s.).—Arrival at Port Nolloth.—The Galatea, with outward cargo, and to load about 500 tons of ore. —Sales by Public Ticketing: 555 tons of ore on Jan. 26, at an average 16s. 5½d. per unit, realising approximately 12,290*l*.; 700 tons on the 9th inst., at an average of 16s. 8d. per unit, realising approximately 13,600*l*.—Put Forward for Sale: 900 tons of ore on 23rd inst.

MENZENBERG.—R. K. Roskilley, Feb. 6: We are getting on well in driving the 45, west of cross-cut, and the men are making progress. The lode here has a most promising appearance, and it is letting out more water than usual, which, together with the character of the lode, we are looking forward to an improvement. We shall push on this level with vigour in order to get upon the north and south lodes.

Feb. 9: In the 45, driving south, the lode is large. The driving of the 45, west of cross-cut, is progressing satisfactorily; the lode here is 5 ft. wide, and yielding good stones of copper ore, with a very promising appearance. In the 45, driving south of shaft, the lode is large, and composed principally of spar with spots of copper ore intermixed.

LANESTOSA.—Feb. 6: Asuncion: Judd's shaft has been cleaned up to resume sinking below the 80 metre level; the lode is 7 ft. wide, chiefly of decomposed dolomite, with strings of ore. In the 80 metre level, north of Judd's shaft, the lode is large, with no walls opened, composed of soft carbouate of lime, spotted with ore. The lode in the same level south is 6 ft. wide, and hard, with a fissure on the east side, and is without ore at present; but it ought to reach the deposit gone down in the 60 shortly. The lode in the 60 south continues poor and difficult to drive, owing to its vughy character. The ventilating winze from the 60 is communicated with the 80 metre level, making good ventilation to the bottom of the mine. In No. 1 stope, in the back of the 60 south, the lode is small in places, and very varied in the yield, worth at present ¾ ton of lead and ½ ton of calamine per fathom. In the Hope, in the back of the intermediate level south, the ore is holding up higher than expected, and extending southwards; the yield is ¾ ton of lead and 2 tons of calamine per fathom. A stope has been commenced in the back of the adit, over No. 2 winze, with the double object of proving a promising piece of ground and to get attle for the filling of the stope below. At present the back shows a small branch of lead, yielding ¼ ton per fathom. The lode in Santo Tomas winze, below adit, is 3 ft. wide, improving in character, chiefly loose iron-stained silicious rock, with slabs of hard calamine intermixed. The sampling for the present month is estimated at 20 tons of lead and 30 tons of calamine and mixed ores; but if the 60 metre level stope improves, as hoped, the quantity of lead will be increased.

SILVER MINING IN COLORADO.—A new silver mine is about to be worked in Colorado by an English company, called the Planet Silver Mining Company (Limited). We have received a prospectus, accompanied by a circular, from the managers, Messrs. Harvey, Jordan, and Co., of Moorgate-street; and we take notice of it, as we are pleased to see that something is being done, which, if generally adopted, would tend to again make mining looked upon as it should be —a fair and legitimate enterprise instead of the reverse, which it has too often proved of late. We quote from Messrs. Harvey, Jordan, and Co.'s letter, in which they say "that the vendors to the company are to receive nothing in cash for their interest in the property, and that their payment depends entirely upon the free shares, which they take in lieu of money, becoming valuable from the success of the mine;" also, "that no promotion money is to be paid to anyone." This certainly is the way to gain confidence, and for which both the vendors and those who made the arrangements with them are deserving of every success. It is also stated that it is not intended to incur much preliminary expense, as the capital is small, and about one half of it already applied for by less than 20 persons. We shall watch this mine with interest.

THE BULLION PRODUCT OF THE PACIFIC STATES.—The total bullion product of the Pacific States and Territories for the year 1873 was $72,258,693. This year it was $74·401,055 showing an increase of $2,142,362 over 1873. John J. Valentine, general superintendent of Wells, Fargo and Co.'s Express, who computes the most reliable statistics on this point, writes:—"Our annual statement of precious metals produced in the States and Territories west of the Missouri river, including British Columbia, during the year 1874 shows an aggregate yield of $74,401,055, being an excess of $2,142,362 over 1873. California, Nevada, Utah, Colorado, and British Columbia increased; Oregon, Washington, Idaho, Montana, Arizona, and Mexico (West Coast) decreased. The increase in Nevada and Colorado is merely nominal, but in California and Utah it is $3,100,000, three-fourths of which is to the credit of California. In our statement for 1873 we referred to the yield - $72,258,693—as 'undoubtedly the largest for one year in the history of the coast.' The accuracy of the statement has been questioned, and the yield of 1853 referred to as being greater. Dr. Linderman, director of the United States Mint, whose information is probably as reliable as may be had, names $65,000,000 as the amount produced in 1853, and that amount was not exceeded until 1873, which is now exceeded by 1874, and the recent developments on the Comstock Lode justify the belief that the total product for 1875 will approximate $80,000,000."—*Mining and Scientific Press* (San Francisco).

CAPE COPPER COMPANY.

SIR,—As I wish to be accurate, allow me to say that in my letter of last week, either through inadvertence or a misprint, the sale of Jan. 26 was stated to be at 15s. 5½d. instead of 16s. 5½d. per unit, and the monthly raisings of ore from Ookiep was stated to be 760 instead of 860 tons. The price of Chili bars having advanced, the Standard has had a corresponding rise, the sale on the 9th inst. averaging 16s. 8d. per unit, and the price per ton 26*l*. 11s. 6d.; thus making the average of the two last sales (together about 1255 tons) amount to (say) 24*l*. 11s. 6d. per ton. The raisings for December are reported to be 880 tons of 30 per cent. ore. A LOOKER-ON.

[For remainder of Original Correspondence see this day's Supplement.]

MINING NOTABILIA

[EXTRACTS FROM OUR MINING CORRESPONDENCE.]

CHAPEL HOUSE.—The engines and machinery for sinking the new pits are now completely erected, and the sinking is going on continuously. These pits are for the purpose of working some of the lower seams, in which there is an enormous supply of first-rate coal, which will fetch even higher prices than can be obtained for the coal now being raised. It is estimated that when these pits are in full work 1000 tons per day can be gotten from the property. With its large rolling stock, and the exceptional facilities for shipping its coal derived from its fleet of barges, this company is in a position to compete very favourably with other collieries in the Liverpool district, and we understand far exceed in proportion those of any of its neighbours. The lock-out in South Wales naturally affects the steam coal market, and prices in Liverpool are much firmer. This colliery, therefore, advantageously situated as it is to profit by any favourable turn of the market, ought to reap a rich harvest, and we hear that it is, as a fact, doing this. The guaranteed dividend, at the rate of 15 per cent. per annum, has just been declared.

BREAGE DISTRICT.—After a few gloomy days a brighter aspect is often brought forth. Breage and Sithney have felt the severe panic under the money cloud, but there is one bright hope in view. It is well known that most of the mines in the district are now idle; and no doubt but some of them, if they had laid out a little more money in developing their ends and shafts, would now be in their former dividend position. But here is a mine—Penhall Wheal Vor—which has continued with vigour and determination to sink to the junction of two lodes. I believe they have sunk upwards of 120 fms. without making much sales of tin from this part of the mine. It appears, however, they are now come on the main point. I saw to-day a splendid stone of tin which came from the bottom of the shaft, and I hear they have a good lode. The whole district appears to feel great interest in this mine. I may say the whole of the mining ground joining this set is taken up (I applied for a piece of ground but was too late), awaiting the success of this property, and there are no gentlemen connected with mining more worthy of a rich mine than the Penhall Wheal Vor adventurers. It is generally believed they will be rewarded for their unabated confidence, and it will be the means of setting the whole of the going mines afloat.—J. R.

WEST EGGAR LLE.—At the western mine the stopes are looking better, and good work is being done. A contract has been set here to put the ore into the bin dressed at 2*l*. per ton. This will leave the company a good profit, and in consequence of the improvement in the lode the men will do very well. The cross-cut at the 37, to cut the south lode, is a little easier, and better progress is being made. There are yet about 4 fms. to drive to cut this lode, and from the nature of the ground it seems almost a certainty that a fine course of ore will be met with, especially as in the 10, where the lode was last seen, it contained good lead. At the eastern mine the 34 end east continues to improve. The lode here has a fine appearance, producing good lead as they approach the run of ore ground gone down from the upper levels. An improvement can be predicted here with certainty. The tribute department is going on well, and a fine pile of ore is being got ready. The carriers have been busy in the past week carting down the last parcel of ore sold.

COURT GRANGE.—The stopes in the adit maintain their value for mineral. The lode in the 12, below adit east of Broginan shaft, is worth over 12*l*. per fathom, and has improved for blende.

WHEAL AGAR.—A number of local gentlemen met at this mine on Thursday to witness the final trial of Darlington's rock-drill or borer previous to the air-pipes being permanently fixed to the drills sent to the bottom of the shaft. Exploding charges of dynamite by electricity were also shown by placing three charges at the base or a triangle, 30 or 40 yards apart, which were fired as one shot. All present expressed the greatest satisfaction at the result of the experiments and the quickness with which the drill made holes—3 in. per minute were bored in a hard moorstone granite—the drill making 400 to 500 blows per minute, with a pressure of air of 50 lbs. per inch. The shaft, 186 fms. deep, being now cleared, sinking will be resumed next Monday on a large lode.

SALE OF SOUTH BEDFORD MINE MATERIALS.—The materials and sett of this mine were sold on Tuesday by Mr. W. Nicholl, of Redruth, for 755*l*. The purchaser was Mr. James Richards, manager of Devon Consols—it is understood for his friends. There is no doubt this valuable mine will now be worked with increased energy.

GREAT CRINNIS AND CARLYON CONSOLIDATED MINES.—The house to receive the 100-horse power engine is nearly complete, the woodwork of roof being put on; it is expected to set the engine to work about March. There are five large copper lodes in this sett unwrought below adit. The company consists of noblemen and gentlemen, and all the capital has been subscribed. There appears to be but one opinion of this property by all mining authorities and working miners, and that is that it will be a very rich mine. Several tons of rich yellow copper ore are to be seen at surface, raised from the little Crinnis lode. All the shares were privately allotted. Soon after the engine is set to work, three shafts, now preparing to receive pumping arrangements, will be set to work. This company possesses large tracts of mainland, also foreshore, from the Duke of Cornwall, and under deep sea from the Crown. Extensive operations will be carried out under the sea.

THE IMPORTANCE OF KEEPING MINE ADITS IN GOOD ORDER.—The overflow and choking of adits have always been a prolific source of mischief during every wet season. Started originally without their ulterior object and importance being known, these adits, with their various ramifications, cover miles of ground, and in very many cases their extent is unknown. Driven generally, for the sake of speed, in easy ground, the use of timber became necessary. This in course of time decays, and in cases of pressure, such as the present, it gives way, and the mines consequently suffer. In only one instance in the county, to our knowledge, is there any co-operation to keep these adits in order after the abandonment of mines in the different lords' rights through which they pass and through which they have a common right of highway—the County adit, with Sir F. M. Williams, Bart., M.P., as chairman; the different lords have combined together, and a regularly organised staff is appointed to see to its security, each lord bearing his proportion of the cost, whether the mines are at work or not. A similar course of action might be advantageously carried out in several other of the mining districts, alike for the interests of the lords and the adventurers.

CORNISH MINE SHARE MARKET.—During the past week the Share Market continued inactive, and there has been but little business transacted. Prices of shares in many instances close rather lower, but no fluctuation of importance has taken place. The metal market keeps dull. No great improvement, we think, can take place in the price of shares until the price of tin advances. The following are the closing prices:—Carn Brea have kept quiet all through the week at about 52 to 54, the same as before the meeting; a rise in tin would advance the price of these shares as much as or more than any in the market. Botallack, 55 to 60; nothing doing. Cook's Kitchen shares, which advanced to 9¾, 10¼, leave off weaker at 9 to 9½; they can work Dunkin's lode here at a great advantage now that they have holed Dunkin's shaft; this lode runs about 180 fms., and can be stoped for about 2*l*. and driven for about 5*l*. per fathom.; at the meeting to be held at about the 18th it is not certain that a call will be made, although a loss on the three months' working will probably be shown; the good effects of holeing Dunkin's shaft cannot be felt much until the next meeting. Dolcoath shares moderately dealt in, and close about 49¾ to 50¼. Ding Dong shares called 6 to 7. East Pool a little dealt in at 12½ to 12¾, where they close. East Lovell shares, 6½ to 7½. Providence, 5 to 5½, steady. South Condurrow shares, 5 to 5¼. South Crofty shares flat, and have declined to 10, 11. South Carn Brea shares lower, 20s. to 22s. 6d. Rosewall Hill a little enquired for at 6s. to 8s. South Frances, 9 to 10. Trumpet Consols, ⅞ to 1⅛; nothing doing. Tincroft a little dealt in at about 28, closing 27¾ to 28. West Basset, 7¾ to 7¾. West Seton, 7 to 9; they are slowly forking the water here by the aid of the last new lift, and at the present rate they will probably get to the bottom in about five or six years; a contemporary suggests a portable engine to assist the present one; three or four such might possibly be of some service. At West Frances they have an improvement in the 144, and shares have been largely dealt in at 9½ to 10½, closing 9¾ to 10¼. West Tolgus rather in demand at about 67, closing 66 to 68. Kitty (St. Agnes), 5 to 5¼. Wheal Jane, 5 to 5¼. Uny lower, 3 to 3¼. Wheal Peevor close at 5 to 5¼, and have been moderately dealt in.—*West Briton*.

COPPER ORES.

Sampled January 20, and sold at Swansea, February 9.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Cape Ore.....	68	34½.....	£28 10 6	Union Ore ...	85	4½.....	£2 14 6
ditto.....	67	34½.....	28 12 0	ditto.....	84	4	2 15 6
ditto.....	66	34½.....	28 1 6	ditto.....	60	9½.....	6 17 0
ditto.....	66	34½.....	28 13 0	ditto.....	4	15¾.....	12 13 6
ditto.....	76	35½.....	29 7 6	Bampfylde...	35	7¾.....	6 1 0
ditto.....	76	35½.....	29 1 6	ditto.....	32	3¾.....	2 9 0
ditto.....	76	35½.....	28 17 6	Copper Precl.	23	70½.....	55 17 0
ditto.....	8	34½.....	28 9 0	ditto.....	10	28½.....	21 8 0
ditto.....	19	29¾.....	24 9 6	ditto ore....	19	10½.....	7 13 0
ditto.....	17	31	25 17 6	ditto precl.	1	87	66 0 0
ditto.....	84	24½.....	19 19 6	Copper Matt.	20	7¼.....	7 7 0
ditto.....	83	24½.....	19 19 6	Concordia ...	5	46¼.....	38 11 6
ditto.....	12	38	31 12 6				

TOTAL PRODUCE.

Cape Ore	718	..... £19,084	5 6	Cop. Precipitate	53	..... £ 1,709	18 0
Union Ore	233	 926	8 6	Copper Matt ...	20	 147	0 0
Bampfylde	67	 290	3 0	Concordia Reg...	5	 192	17 6

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
Copper Miners' Company	91½.....	£ 1,877 17 3
Nevill, Druce, and Co.....	107	3,744 13 0
Vivian and Sons.....	147	1,068 0 0
Williams, Foster, and Co.	252	6,513 7 0
British and Foreign Copper Company	84	1,677 18 0
Mason and Elkington	30½.....	1,064 9 3
Sweetland, Tuttle, and Co.....	370	6,211 10 6
Capper Pass and Son	5	192 17 6
Total.....	1096	£22,350 12 6

Copper Ores for sale at Swansea, Feb. 23.—Cape Ore 75, 75, 75, 74, 63, 63, 62, 62, 15, 38, 37, 29, 3, 67, 67, 14, 65, 7, 1, 12, 19—Australian Ore 7—Copper Precipitate 5. —Total, 935 tons.

TOTALS AND AVERAGES.

	21 cwts.	Produce.	Price.	Per unit.	Standard.
Whole sale ...	1090	24¼ ...	£20 7 10	16s. 5d....	£103 3 0

COPPER ORES.

Sampled Jan. 20, and sold at Tabb's Hotel, Redruth, Feb. 4.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
West Tolgus	66	£5 16 0	Wheal Basset	25	£6 17 0
ditto	60	9 15 6	ditto	18	7 15 0
ditto	59	8 9 0	West Basset.....	36	5 9 6
ditto	55	5 8 6	ditto	35	6 10 0
ditto	52	4 8 6	East Grenville.....	41	2 16 0
ditto	51	7 8 6	ditto	20	6 11 6
ditto	42	5 10 0	St. Aubyn United	25	5 4 6
Crenver and Abraham	76	2 11 0	ditto	24	4 5 0
ditto	74	4 15 6	ditto	12	11 18 0
ditto	59	5 19 0	South Dolcoath	40	3 19 0
ditto	50	4 2 0	Botallack	30	20 10 0
ditto	45	2 12 0	South Roskear	21	2 2 0
ditto	36	2 17 0	Tremenhere	14	6 10 6
ditto	22	2 2 0	ditto	5	2 18 0
West Seton	58	4 8 0	Annear's Ore	9	4 7 0
ditto	50	4 10 6	ditto	4	3 10 0
ditto	23	4 12 6	ditto	3	0 15 0
South Crofty	48	2 7 0	Unity Wood	15	4 14 6
ditto	47	3 14 6	South Frances.....	10	4 14 0
ditto	5	13 7 6	New Rosewarne	10	3 17 0
East Pool	62	2 18 0	Wheal Buller	8	2 16 0
ditto	17	4 1 0	West Stray Park	2	3 0 0
Wheal Basset	33	5 1 0			

TOTAL PRODUCE.

West Tolgus	335	£2606	0 0	Botallack	30	£ 615	0 0
Cren. & Abraham.	362	1369	0 0	South Roskear ...	21	44	2 0
West Seton	131	587	16 6	Tremenhere.....	19	105	17 0
South Crofty	100	354	15 0	Annear's Ore	16	55	8 0
East Pool.....	79	248	13 0	Unity Wood	15	70	17 6
Wheal Basset	76	477	8 0	South Frances.....	10	47	0 0
West Basset.....	71	424	12 0	New Rosewarne ...	10	38	10 0
East Grenville.....	61	246	6 0	Wheal Buller	8	22	8 0
St. Aubyn United.	61	375	8 6	West Stray Park..	2	6	0 0
South Dolcoath ...	40	158	0 0				

Average standard ..... £108 19 0 | Average produce 7⅞
Average price per ton..... £5 5 0
Quantity of ore ..... 1497 | Quantity of fine copper 109 tons 17 cwts.
Amount of money..... £7853 1 6
LAST SALE.—Average standard ..... £111 14 0 | Average produce..... 6⅞
Standard of corresponding sale last month, £108 19 0—Produce, 7⅛.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
Vivian and Sons.....	234	£1551 8 0
Grenfell and Sons	312½.....	2302 17 9
Nevill, Druce, and Co.....	239½.....	1063 7 3
Williams, Foster, and Co.	76	193 16 0
Mason and Elkington	276	1118 7 6
Copper Miners' Company	105	360 10 0
Charles Lambert	102	483 10 0
Newton, Keates, and Co.	150	773 5 0
Sweetland, Tuttle, and Co.....	2	6 0 0
Total	1497	£7853 1 6

NO SALE on Thursday last, Feb. 11.

Copper Ores for sale at the Royal Hotel, Truro, on Thursday next.—Mines and parcels.—South Caradon 410—Marke Valley 331—Hingston Down 260—Glasgow Caradon 240—East Caradon 140—Bedford United 110—Wheal Russell 106—Prince of Wales 97—Gawton 86—Phœnix 52—Wheal Friendship 40—Duchy Great Consols 37—Treffry's Reguius 30—Calstock Consols 12—Belstone 11—Skewes's Ore 4.—Total, 1966 tons.

Mining Correspondence.

BRITISH MINES.

ABERDAUNANT.—S. Toy, Feb. 10: No. 2 adit level, driving east, is at present producing more carbonate of lime than it has for some time past, and stones of lead are occasionally met with, but not of sufficient quantity to value. No. 4 stope, above this level, is the same as last reported, worth 13*l.* per cubic fathom for lead. —No. 1 Adit: The ground still continues favourable for driving in the south and soft part, which is 5 ft. wide, and is composed of soft killas and carbonate of lime, of a kindly appearance, and with a very large part of the lode standing to the north.

AMBROSE LAKE.—P. Temby, Feb. 4: The lode was taken down this morning in both the bottom levels west of the cross course; the lode is 16 in. wide, well defined, and worth 2½ tons of rich copper ore per fathom. East of cross-cut the lode is 1 ft. wide, worth 2 tons of ore per fathom. Since we commenced opening on the lode it has improved in both ends, and from all appearance as we get away from the influence of the cross-course it will further improve. The winze in the bottom of the deep adit is worth fully 3 tons of ore per fathom. I should strongly recommend the sinking of this at once, as it would ventilate the bottom of the mine, and lay open the ore ground for stoping. If this is done we shall soon be able to have a good parcel of ore for market.

— Capt. Pascoe, Feb. 8: I have inspected the Ambrose Lake Mine, and beg to hand you my report thereon:—In the sett there are three well-known and well-defined east and west lodes, also several north and south lodes. Two shafts have been sunk from surface, about 60 fms. apart, on the south or engine lode. An adit level has been driven from the western part of the boundary some distance beyond the engine-shaft, at a depth of 25 fms in the whim-shaft, but at a greater depth in the engine-shaft, on account of the elevated position of the engine. The south, or engine, lode has been productive at various points, good saving work for tin having been found, but for the last 10 fms. sunk in the engine-shaft it has not produced much. A cross-cut has been driven from the deep adit level for about 28 fms., on a cross-course. When the middle lode was intersected, and a fine lode of copper ore found going down below the sole of the level, sinking was commenced, but when down about 5 ft., owing to the strength of the water, it had to be abandoned. The cross-cut being resumed, Wheal Sisters lode was also intersected; it is a strong and masterly lode, and yields some very fine stones of copper ore at various points in the levels driven on its course. These two lodes being so promising, another cross-cut was commenced from the engine lode, at a point 14 fms. lower, and about 3 fms. east of the whim-shaft. After driving about 32 fms. the middle lode was reached; it has been taken down for about 9 ft., and is worth for copper ore about 2 tons per fathom. You have now about 5 fms. to drive east to get under the winze sunk in the level above, when I should advise that a communication be made between the two levels with all speed. As far as can be seen, you have here a profitable piece of ground standing between this point and the eastern boundary, and when the communication is effected a good run of stoping ground will be opened up—such as has not yet been seen in the mine. I should advise that the cross-cut be then extended to the Wheal Sisters lode, which is from 6 to 8 fms. further north. Judging from its appearance in the adit level, I have no doubt but that the ore will be found in paying quantities. This being the champion lode in the neighbourhood, from which immense quantities of ore have been raised, good results may reasonably be expected when it is intersected 14 fms. below the adit level. I would also remark that you have here a great inducement for deeper development. Looking at the underlie of the Middle and Wheal Sisters lodes, they are likely to come together at a point about 14 fms. deeper, where I have no doubt a large body of ore will be found. Had I an interest in the mine I would most certainly retain it until the points indicated above are developed. You have a powerful pumping-engine, capable of draining the mine, with pumping gear fixed in each shaft, to any reasonable depth. The ground is easy, very little timber required, and labour cheap. I should advise you to push on the points before referred to with all speed.

— P. Temby, Feb. 10: On Saturday last we took down the lode in the west end, and this morning in the east end, both have improved for copper, and the lode more settled. In the west end the lode is 16 in. wide, and in the centre there is a rich leader of grey copper 5 or 6 in. wide. I have just brought up one of the finest stones of ore I ever saw, I think it will make 50 per cent. We have taken down about 3 tons of good ore, and shall draw it to surface to-morrow. The lode in the east end has also improved, it is about 1 ft. wide, and almost solid yellow ore, much better than when I sent my last report.

BEDFORD UNITED.—William Phillips, Feb. 11: The lode in the 115 winze is 3 ft. wide, worth 6 tons of ore, or about 25*l.*, per fathom, and is promising for further improvement. In the 115 fm. level east the lode is 4 ft. wide, producing 4 tons of ore per fathom. The stopes in the back of this level yield on an average about 15*l.* worth of ore per fathom. The midway east is worth 15*l.* per fathom. In the 103 east we are driving by the side of the lode. The lode in the 103 west is worth 12*l.* per fathom. The stope in the bottom of this level is producing about 12*l.* worth of ore per fathom.—South Lode: In the 47 east the lode is more promising, yielding kindly stones of ore. A new level is commenced east and west of the rise in the back of this level, to be called the 21. The lode at this level is 3 ft. wide, of a very promising character. The indications lead me to hope that a course of ore is not far distant.

BLUE HILLS.—S. Bennetts, A. Gripe, Feb. 6: The 50, west of Poulyear shaft, on the south part of the Pink lode, has improved during the past fortnight, and is now worth 8*l.* per fathom. The 40, west on the same part of the lode, is worth 5*l.* per fathom. The lode in the winze below the 13 continues much as last reported —worth 8*l.* to 9*l.* per fathom. The weather of late being less rainy the water in the mine has considerably fallen off.

BOG.—W. T. Harris, J. Barkell, Feb. 10: The water is again in fork to the bottom of the mine, and good progress is being made in driving the three bottom ends. The cavity in the end driving west, on the Whitestone lode, has been nearly closed up for some days past, but to-day it appears to be opening out again; the lode at present is worth 2 tons lead per fathom. The end driving west, on the main lode, is producing good saving work for the dressing floors, worth about 15 cwts. lead per fathom. The end driving east, on the south lode, at this same level, is improving, now worth 1½ ton lead per fathom, and the ground very favourable for progress. There is no change in the end driving west, on the Whitestone lode, at the 163; the ground is hard, and slow for progress. The level west, on main lode, is producing 15 cwts. lead per fathom, and the ground is favourable. In the 100 good progress is being made in the end driving east of Bunton's shaft, and we expect shortly to cut into the run of ore-bearing ground gone down in the bottom of the 60. The tribute pitches are yielding the usual quantities of lead and blende, with the exception of the pitch in back of the 175, which is not looking quite so well.

BOWDEN HILL.—J. Goldsworthy, Feb. 8: The branch or lode referred to in my last has been driven through; it varies in size from 6 to 10 in. wide, composed of friable quartz, flookan, and iron. To the south of this the ground is easier for progress, and more favourable for the production of manganese; I regard this as a most favourable change. Good progress is being made. The adit is extended 78 fms. 3 ft. 1 in.

BRONFLOYD.—John Davis, July 9: The No. 1 stope at the 96 is poor at present. The No. 2 stope, adjoining No. 1, is worth about 2½ tons per cubic fathom, and the extension of the same (3 fms. in length) towards the shaft No. 3 is of equal value. The stope over the new arch at the 73 is of the average value of 1 ton per cubic fathom. There is a fine course of ore in the eastern end of this stope, and we are going to lengthen it another 3 fms. at once. This bunch comes down within about 3 ft. to the roof of the level, and is then cut out by a slide dipping north. The lode at this level being driven under the old tribute pitch at the 52 is worth 1 ton of ore per cubic fathom for the width we carry. When this level is extended far enough there will be a fine stope here. The ground above this is whole to the 40, and a few fathoms further west is whole to the 17, I think. All surface work going on regularly.

CALDBECK FELLS.—J. Polglase, Feb. 5: Instead of detailing all the bargains in the usual way, I beg more particularly to notice the principal points of operations, and which are likely to be especially attractive. The 90 end west is improved in appearance; the rock is more felspathic, and the lode stuff more congenial for mineral, containing blende and spots of copper ore, and a little more water. I have a good opinion that a change for the better is not far distant. We are pushing on this point with a full company of men. The 20 end east is the other point referred to. The lode so far as seen is worth for lead 50*l.* per fathom, and driving at 7*l.* per fathom, 6 ft. wide by 7 ft. high; the lode is more solid in this end than I have seen it in any of the operations in this part of the mine. A continuance of this lode is of the greatest importance to the company; at present, however, there is no indication of the lode falling off in value.

COURT GRANGE.—Capt. E. Dunkin, Feb. 11: In the 12, east of New Broginan shaft, there has been but little of the lode taken down in the past week, so that there is no alteration to remark. After clearing the accumulated stuff in the level we shall at once blast it down, and report thereon. In the winze sinking under the adit the lode continues large and kindly, and has improved a little for blende. We are working hard in getting around the dressing machinery, and considering the nature of the work, are progressing favourably. The engine is in good order and pumping regularly, but we have not yet succeeded in forking the water from the 50 fm. level again.

CRENVER AND WHEAL ABRAHAM UNITED.—Wm. Thomas, S. Arthur, Feb. 10: Sturt's Engine Shaft: In the 228, west of shaft, the lode is 2 feet wide, yielding good stones of copper ore; we may reasonably expect an improvement here shortly, as we are near the ore ground now sinking through in the bottom of the 215. In the winze sinking below the 215 west the lode is 3 ft. wide, yielding 3 tons of copper ore per fathom. In the 215 driving west the lode 3 ft. wide, producing copper ore to dress, having a kindly appearance.—St. George's Shaft: In 203, driving east on the south lode and west of shaft, the lode is 2 ft wide, yielding 1½ ton of copper ore per fathom; it is letting out water freely, which we consider a favourable indication. In the 190 east, on the south lode, the lode is 2 ft. wide, producing good stones of copper ore.—Woolf's Shaft: In the 220, driving east of shaft, the lode is 4 ft. wide, and yields a little copper ore; and the 220 end driving west the lode is 3 ft. wide, and also produces copper ore to dress.—Pelley's Engine Shaft: In the 248 driving west the lode is 2 ft. wide, producing good stones of tin and copper ores.—Richards's Shaft: The lode in the 220, west of shaft, is 4 ft. wide, and will yield 1 ton of copper ore per fathom; the lode in this end has a much better appearance. In the rise in the back of the 200 west the lode is 3½ ft. wide, producing 2 tons of copper ore per fathom; this end is opening up good tribute ground. There are employed on tutwork this week 94 men and boys: on tribute, 141 men and boys; at surface, 42 men and boys: total, 277 men and boys.

CWMYSTWITH.—Setting List: In the 30 east, on the north lode, the lode is small and poor; suspended for the present. We have placed the men to drive a cross-cut north in Kingside adit. In Michell's level, to drive east, on the new lode, the lode is 3 ft. wide, showing good spots of lead ore; worth 10 cwts. per fathom, a nice looking lode. In the rise in the back of Michell's level (new lode) the lode is poor, and suspended; we have set the men to drive on another bargain. In Michell's level, to drive east, on the south lode, the lode is 2 ft. wide, composed of gossan, spar, and blend, but poor for lead ore. A cross-cut to drive north in the 15, east of Kingside shaft. We are still getting branches of lead ore in the cross-cut, and have about 4 fms more to drive to get in line for the branches now being worked on tribute. A cross-cut to drive north in the Kingside adit level, east of Kingside shaft. This is a new bargain, set on to prove if there is anything of value standing to the north over No. 4 pitch; we think it a worthy trial. Our pitches are still producing the usual quantity of lead ore, and in the trials now making we have a fair chance of a good discovery at any time. All the machinery is in good working order. We are pushing on with the dressing as fast as possible, and shall sample 15 tons of lead ore on the 16th inst.

DE BROKE.—T. Hodge and Son, Feb. 9: We are making fair progress in sinking Wilson's engine-shaft, and hope to get it down to the 25 without the aid of a lift. The water has greatly fallen off during the past fortnight. We have nothing new in the stopes calling for remark. The dressing and surface work going on regularly.

DENBIGHSHIRE CONSOLIDATED.—J. Pryor, Feb. 11: The ground in the 112 east is much better for driving, and the lode in the back fully 3 ft. wide.—The 112 West: A more promising end than this no one has seen, and the nature of the ground is such as would induce anyone to believe that we cannot be far off the intersection of Parry's lode; the end is letting out a great deal more water than it did before. No doubt this will increase when the junction is met with, but we have ample power to meet all emergencies; the greater the water the better the lode. The tribute pitches are let at the same price as last month, also the other bargains. Busy dressing ore.

DEVON GREAT CONSOLS.—J. Richards, Feb. 11: Wheal Maria—New North Lode: In the eastern shaft, sinking below the 28, the ground admits of fair progress being made. In the 28 west fair progress is being made, and the lode is 3 ft. wide, composed of capel, mundic, quartz, peach, and a small proportion of tin.—Wheal Emma—Railway Shaft, New South Lode: In the 160 east the lode is 5 feet wide, composed of mundic, quartz, capel, and good stones of ore. The lode in Burgoyne's winze being stripped down below the 130 west is worth 3 tons of ore, or 10*l.* per fathom.—New Shaft, New South Lode: In the 145 east the lode is still 6 ft. wide, a good course of ore, and worth 45*l.* per fathom. In the 130 east the lode is still 5 ft. wide, and worth 4 tons of ore, or 16*l.* per fathom. In the new, or Parson's winze, sinking below the 130 fm. level, 35 fathoms east, a portion of the lode carried (3 ft. wide) is worth 6 tons of ore, or 25*l.* per fathom. In the 115 east the lode is from 2 to 3 ft. wide, producing good stones of ore.

DYLIFFE.—E. Evans, E. Rogers, Jan. 29: Dyliffe Lode: The 120 is set to drive east of boundary shaft by six men, the month, at 7*l.* per fathom; the lode is worth 15*l.* per fathom. The 40 is driving east of this shaft by six men, at 6*l.* 15s. per fathom; the lode in the present end is worth 18*l.* per fathom. The 25 is set to drive east of old engine-shaft to six men, the month, at 5*l.* per fathom; the lode is unproductive. In the bottom of the 25, west of old engine-shaft, we are sinking a winze by the side of the lode by six men, at 6*l.* per fathom, which will lay open some profitable ground at the 40. The 15 is driving east by six men, at 6*l.* 5s. per fathom; the lode is producing a little lead ore, but we expect an improvement in this end in a short distance. The winze in bottom of the adit is set to nine men, at 7*l.* 15s. per fathom, to communicate to the stopes in the back of the 15.—Esgairgaled Lode: At the 45 there are four men stoping the back at 1*l.* 15s. per fathom; this ground will be taken away at a profit so soon as we make a communication. The winze in bottom of the 35 is set to six men, at 5*l.* 10s. per fathom, and when holed will ventilate the level below, as well as open out some profitable ground. Our tribute setting is 26 men, at 5*l.* per ton—12 men at 5*l.* 5s., eight men at 5*l.* 10s., six men at 6*l.*, and two men at 7*l.* per fathom.

— E. Evans, E. Rogers, Feb. 10: Dyliffe Lode: At the 120, driving east of boundary shaft, the lode is worth fully 15*l.* per fathom, and there is a sign of improvement. There is no alteration worthy of notice in any other parts of the mine since the report of 29th ultimo. We sample 60 tons to-day, for sale on the 17th instant.

EAST WHEAL BASSET.—R. Pryor and Son, Feb. 10: During the past week there has been no change in this mine worthy of notice.

EAST WHEAL GRENVILLE.—E. Hosking, W. Bennetts, Jeb. 6: No change to notice since our last.

EAST WHEAL GRENVILLE.—E. Hosking, W. Bennetts, Feb. 11: The lode in the 130, west of engine-shaft, is 2 ft. wide, and worth 6*l.* per fm. The winze below the 120 west is worth 5*l.* per fm.; we hope to hole by the end of the week. There is no change in the 120 cross-cut north. We have suspended driving on the new lode cut in the 110 south, and have resumed the cross-cut, as we think there are other lodes further south. The rise above the 110 east is worth 8*l.* per fathom. The stope above the 110 east is worth 6*l.* per fathom.

EAST WHEAL LOVELL.—R. Quentrall, Feb. 10: Fatwork: The lode sinking below the 100 is 8 ft. wide, producing fair quality tinstuff throughout, and looking promising to improve.—Tregonebris: There has been no lode taken down in the 34 east since my last report; the stope in back of this level is worth 16*l.* per fm. We are keeping the water easily now throughout the mine.

FURZE HILL.—W. Doidge, Feb. 11: No. 1 North Lode: Since my last report we have cleared and secured the adit level east of Bell shaft upwards of 60 fms., and find the lode here to be hove south-east, and that it is still further in that direction in the midway level. The last 15 fms. cleared in the adit is on the course of the lode, and, as far as seen, is standing whole. The level beyond this is full of attle. Samples taken from various places throughout this distance produced 46 lbs. of tin to the ton, thus indicating that the ancients had something better in this part of the sett, otherwise this lode would have been taken away. The midway level is now being driven by a full pare of men, and at the present rate of driving (2 fms. per week) it will occupy two months to reach the point referred to in the adit. The stopes throughout the mine, on the whole, are not looking so well as last reported on; average value at present about 5*l.* per fm. We sold yesterday 3 tons 8 cwts. 3 qrs. 22 lbs., which will nearly meet the working cost, although at present we have 12 men doing dead work—six driving the level already referred to, and six cross cutting south at the 40, to intersect a lode known to exist in that direction. Should these points prove productive the prospects of the mine will be greatly enhanced.

GAWTON COPPER.—George Rowe, George Rowe, jun., Feb. 6: The lode in the 117, east of King's engine-shaft, is showing a kindly appearance, and yielding good stones of mundic and ore. The lode in the 95, east of cross-cut, is over 3 ft. wide, worth 12*l.* per fathom. The lode in the stopes in bottom of the 82 is improving, worth 10*l.* per fathom. The ground in the 82 cross-cut south is hard capels and spar, spotted with ore. The lode in the stopes in back of the 82 fathom level is worth 12*l.* per fathom. The lode in the rise and stope in back of the 70 is worth 10*l.* per fathom.

GLASGOW CARADON CONSOLS.—W. Taylor, W. J. Taylor, Feb. 9: In the 78 east the ground and lode are more favourable, worth 6*l.* per fathom. In the 78 west the lode is not looking quite so well, worth from 8*l.* to 10*l.* per fathom; we expect to see this end improve, the ground is very favourable. The middle level west is worth 18*l.* per fathom, and the east worth 12*l.* per fathom. The winze coming down on this end from the 65 is worth full 15*l.* per fathom; we hope to hole this ground this month, which will open out a good piece of ore ground for stoping. The 65 east, on south part, is improved, worth 15*l.* per fathom; ground easy; we are obliged to suspend sinking the winze east on this lode (worth from 15*l.* to 20*l.*) for want of air until we have made the communication on the north part; we have commenced a new winze further west, on the same lode, worth 12*l.* per fathom, and which will, no doubt, improve. In the 52 east the lode is larger, spotted with ore, altogether looking more promising than for some time past. No change in any other part of the mine. The stopes and pitches throughout the mine are looking very well, varying in value from 10*l.* to 25*l.* per fathom. We sampled yesterday (computed) 240 tons of copper ore, which will be sold on Feb. 18.

GLYN.—James Roach, Feb. 11: During the past month we have cleared the adit level north of Discovery shaft to the lode, and driven through the same, and also driven east on the north part of the lode some 2½ fms., where we met with several pieces of lead ore, and this at a depth of only 10 fathoms from surface. Sinking the shaft will be resumed as soon as possible, which has lately been interrupted by very wet weather.

GOGINAN AND LEVEL NEWYDD.—Feb. 8: Good progress is being made in sinking Bryn Pica shaft below the 80, and we shall commence to rise against the same from the 100 in the course of a day or two. These points will be pushed on with the utmost dispatch in order to effect a communication as quickly as possible, and when this is effected it will greatly facilitate the sinking below the 100, and enable us to reach the ore ground speedily. The western shaft below the 80 is being carried down by nine men, and will be completed to the 110 in about three weeks time. We shall in a few days commence preparations for fixing the turbine at the 60 to draw the stuff, &c., from below the 100 at both shafts. The tribute pitches are producing on an average 14 cwts. of lead ore per fathom. Dressing, &c., is being pushed on with full dispatch, and we sampled 20 tons of silver-lead ore on Tuesday last.

GORSEDD AND MERLLYN CONSOLS.—Feb. 11: We are not working below the level on the Gorsedd lode, but have started to continue the driving further east, so that we can explore more satisfactorily upon its course; judging from what we have seen in the trench, we should expect to find the main body of the producing ground as advancement is made. In opening upon the trench westward we did not find the run to carry productively, so this has led us to extend eastward, which will be entering all the whole and unexplored ground above the level. On Gorsedd lode west the men are making fair progress in the driving. —Merllyn Shaft—Newland: We are progressing very satisfactorily with this. At to-day's ticketing we sold 10 tons of ore, realising 15*l.* 13s. 6d. per ton.

GREAT RAKE (Brassington).—Edmund Fearn, Wm. Ball, G. Baghurst: In accordance with a resolution passed at a meeting of the directors held on Monday, Jan. 4, appointing three of the directors to visit the Great Rake Mine, to inspect the works, and to report the result of such inspection:—1. We beg to report that we visited the Great Rake Mine, on Wednesday, Jan. 6, 1875; we found all the men at work. The gin was doing good duty, having drawn that day close upon 100 barrels of stuff; very fine veinstuff it was, so much so that we were well satisfied.—2. Our next step was to go down the pit. We should mention that we took advantage of the gin and rode down, giving instructions to the man in charge to be lowered down slowly, in order that we could examine the pit as we went down. Our report is that the pit is in first-class order, and bears signs of excellent workmanship.—3. Our next inspection was Bonny Lad adit. The work done here is good; the parts that require timber are made thoroughly secure. There is a tramway of wrought-iron rails. The length of this adit is 30 yards; the drivage is now very soft, and requires timber. Taking into consideration the nature of this drive, and the very short distance to drive before we are under the old workings of Bonny Lad, shows to us most plainly that we shall in the course of a few weeks be in possession of something good, that there will be a good return to the shareholders from this point, taking into account the large amount of calc and calamine which the directors have seen in Bonny Lad old workings. The short distance we have to go to get into those works will convince everyone that sees the mine that we cannot fail to do well; and especially taking into consideration our present means of being in a position to bring to the surface more stuff in one day than the old miners could in a month.—4. The Great Rake adit was our next inspection. The length of this adit is 40 yards, and is well laid with wrought-iron rails. This drive at different points has been very hard, and has required much labour to get through. We are pleased to report that this drive is now breaking into what is known to be the great vein. The chances are that we shall not be troubled with having to blast hard panels for some time to come. We may expect to hear any day that this point of the mine is all we could wish. Our only regret is that the whole of the shareholders were not present to see the beautiful prospect which this drive is opening up. We may also add, from the short distance we have to go before we are at those points where we have already seen good ore, we are, if possible, more than certain of doing well. We found the works going on satisfactorily, the men being placed at those points which showed to us that nothing was being lost in shape of labour. The directors wish to point to the amount of work done at the mines. A first-class shaft, 40 yards deep, has been sunk, and a substantial gin for winding has been erected over it at a cost of over 30*l.*; and other works. The directors believe that at no very distant date the mines will prove most remunerative.

GREAT RETALLACK.—John Harris, Feb. 6: I have set the men a bargain to strip down a piece of lode standing at the south side of the 40, east of Stephen's shaft, for 7 fms. long, at 15*l.* for the job. It is a part of the good lode we last met with, which was valued in places as worth 8 tons of blende per fathom, so I am hoping to get a good pile of blende from it when taken out.

GREAT RETALLACK.—J. Harris, Feb. 11: The lode that is being stripped down at the south side of the 40 continues to look well for blende, quite as well as when we drove the level through it; and I am hoping to get a good pile from it.

GREAT WEST VAN.—T. Hodge, Feb. 10: At Eliza's, in the 44 north cross-cut, we are making fair progress in a favourable rock.—South Lode: The lode in the 46 west end is looking more promising than for some time past, and I think we are nearing a change for the better. The rise in the back of this level is improving, yielding about 5 cwts. of lead per fathom. I have placed a pare of men in the back of the 46 west, to take up a stope for trial at a point where the lode looks promising. We have no change in either of the stopes worthy of notice; they are yielding fair quantities of ore. Dressing is going on regularly.

GREEN HURTH.—Wm. Vipond, Feb. 5: In the end south from incline, on No. 1 cross vein, the ground is still very confused, and I am of opinion there is something ahead of us to cut, which is partly the cause of the present disturbance. The end is comparatively poor to what it usually was further back. The stope and east side behind and above this is yielding pretty well; the stope is particularly good. The working on the west side further back is getting into poorer ground; it is coming very near the old sump where the vein first began to yield well at this random. The stope above adit continues good, but there has been no work done at it for the last fortnight; we got the work cleared out of it, and the men for the last 10 days have been getting stones (deads) into the place, so that they can get up to the stopes to work it; we shall have a great deal of ground to filll up in this way by-and-bye, and a lot of the stuff will have to be taken in from the surface. I have seen a small sample of ore from the old vein to-day, the first for a long time. Rutter's level continues about as last reported. The cross-cut from rise in the low level gets harder every week; it is certainly slower to drive now in the limestone than the level below would be. We have very hard frost here at present; dressing stopped, but fine otherwise, indeed first-rate for cutting out for wheel pit and new floors; I have three at this job, and there ought to be a few more if there was any certainty of reasonable weather continuing. Bargains on Monday, which I shall send you with value of workings. I note that 100 tons of ore is sold to Messrs. Shield and Dining, and shall expect the carriers soon.

HINGSTON DOWN CONSOLS.—James Richards, Feb. 11: Bailey's Shaft: In the 150 west the lode is from 4 to 5 ft. wide, consisting of quartz, capel, peach, mundic, and a little of both tin and copper ores. In the 150 west, east of Cocking's winze, the lode is 4 ft. wide, and continues worth 25*l.* per fathom. In the 140 west the lode is 3 ft. wide, and produces saving work for copper ore. In the 140 west, on the north part of the lode, the lode is 2 ft. wide, and produces good stones of ore. In the three stopes in the back of the 140 west the lode is worth 25*l.* per fm. The lode in the 120 west is from 2 to 3 ft. wide, composed of capel, quartz, peach, mundic, and a small proportion of copper and tin ores. In the stope in bottom of the 120 west, and west of Wadge's winze, the lode is worth 12*l.* per fathom. The lode in the stope in bottom of the 120 west, and west of Wadge's winze, on the north part of the lode, is worth 10*l.* per fathom. In the 110 west the lode continues to produce a little copper ore and rich stones of tin. Brewer's winze, below the 110 west, is communicated with the rise in back of the 120, and the men will now be employed rising in the back of the 110, about 7 fms. behind the present end, where the lode is worth 15*l.* per fathom.

ILLOGAN.—Richard Pryor and Son, Feb. 10: In the deep adit cross-cut, driving south of engine-shaft, the ground presents indications of becoming more favourable for progress as well as of our near approach to a lode. The other places throughout continue just as when last reported.

LADYWELL.—A. Waters, Feb. 11: The adit end south, on the caunter, is going forward in a lode 5 to 6 ft. wide, composed of loose stones, gossan, and clinkers of solid lead ore; this lode is not very productive at present, but the country rock, as well as the veinstuff, indicates our approach to something good south of the present workings. In No. 1 winze, below the 16 south, on the above lode, we are going down into productive ground, and the lode improves in depth. No. 2 winze south is down to water, and the men are driving north from the bottom of the winze in a soft orey lode. The stopes in the 16, north of the engine-shaft, are now worth 15*l.* per fathom. Fair progress is now being made in sinking the shaft below the 16 fm. level. Nothing new to notice in the 32, nor in the 16, north of the flat-rod shaft.

NEW CONSOLS.—R. Pryor and Son, T. Jenkin, H. Vial, Feb. 9: There has been no change throughout the underground department of this mine within the past week worthy of comment. Our surface operations are progressing as rapidly as can be expected. Saturday next being our pay and setting day, a full report shall follow.

NEW HENDRA.—R. King, Feb. 10: The men in the deep adit level are still driving on the branch or lode bearing north-east in a channel of good ground, and the branch produces a little copper, but nothing to value. They are making good progress in this direction, so much so that they can drive three times as much ground than we could in the former direction, consequently we shall reach the desired object in a great deal less time and at less expense.

NEW HOBBS HILL.—T. Rowse, Feb. 11: The stone-breaker is put to work again; all the working parts are new. I see no alteration in the stope since last report worthy of notice, and the tin on the floors is about the same from the quantity of stamps. I now think things look fair for a good sampling.

NEW ROSEWARNE.—E. Hosking, W. Bennetts, Feb. 6: The lode in the 67, west of Pool's shaft, is looking very kindly for, and is producing copper ore and mundic. There is a good lode of copper ore coming in the 58, west of Pool's shaft, which is now in the elvan; it is worth 15*l.* per fathom. The lode in the 46, west of Pool's shaft, is 3 ft. wide, producing a little tin and copper ores. In the 22 cross-cut south we have intersected a branch yielding some good copper ore, but we shall drive the cross-cut a little further south to see if there is any more lode before us.

NEW SOUTH MERLLYN.—R. Rowlands, Feb. 11: In the 120 yard level north the men have been meeting with large limestone tumblers in the lode; apparently these will disappear, for in working yesterday the men took out one stone of lead weighing ¾ cwt. No other change to notice.

NORTH LAXEY.—R. Rowe, Feb. 9: The lode in the 121, driving north of the north shaft, is about 2 ft. wide, worth 5 cwts. of lead per fathom, and from appearances likely to improve steadily. No change in the 110 end. In the 84 the lode is 4 ft. wide, of a most promising character, but not rich for lead; we have to save the stuff for the washing-floors. The 60 driving south is yet without any discovery. The stopes are as follow:—One in roof of the 110, worth 1½ ton of lead per fathom. One in the 96, worth 10 cwts. per fathom. One in the 60, worth 1 ton per fathom. One in sole of the 60, worth 10 cwts. per fathom. We sold on the 25th ult., to Messrs. Walker, Parker, and Co., 50 tons of lead, at 16*l.* 7s. 6d. per ton, and are making good progress towards a similar parcel, which I hope will be ready for sale in less time than was taken in getting the last.

NORTH POOL.—W. C Vivian, F. Clymo, Feb. 11: There is scarcely any change in the lode in the 40 east since I last wrote, nor can we expect much until we get free from the disturbing influence of the branches of the cross-course; but of course every day's work takes us further away from this, so that we hope it will not be long before we shall be able to inform you how the lode looks in its natural character, and trust we shall be able to note a substantial improvement.

NORTH PRINCE PATRICK.—Capt. J. Jones, Feb. 11: The engine for the western shaft arrived on Tuesday, and we are busy getting everything ready for it to commence working; and I hope we will not be long before everything is ready, as I am most anxious to see this shaft clear of water. The driving along the Silver Rake vein continues to look most promising, but there is not as yet much lead to be seen, although it shows more than we have yet seen, which proves to me that we are nearing our desired object.

NORTH TRESKERBY.—Richard Pryor and Son, Feb. 10: The lode in the deep adit cross-cut, driving west on tin lode, is of same value as when last reported—10*l.* per fathom. The lode in the shallow adit level, driving west of Doctor's shaft, is producing 1 ton of good copper ore per fathom. In the deep adit cross-cut, driving north of new shaft, there has been no change to remark since last report, but there is still a considerable quantity of water flowing from the end.

OLD BOTTLE HILL.—R. Unsworth, Feb. 10: In the 46, east of Hooper's winze, the lode is 1 ft. wide, producing good stones of copper ore, but not enough to value; I have taken the men from this end to assist in making floors to dress the copper. The stopes east of Hooper's winze, in bottom of the 36, lode 2 ft. wide, worth 6*l.* per fathom. The stopes west of Hooper's winze, bottom of 36, lode 2½ ft. wide, worth 6*l.* per fathom. In the 36, east of Rowe's shaft, the lode is 3 ft. wide, worth 7*l.* per fathom. The tribute pitches are looking very well, and the men by all appearances will get good wages.

OLD TINCROFT CONSOLS.—James Pope, Feb. 10: In the 20, west of Diamond shaft, the lode is 2 ft. wide, producing saving work for tin. In the 10, west of Diamond shaft, the lode is 1 ft. wide, producing average quality tinstone. We are clearing the 20 east to come to some tin ground left by the old workers, where we have tin enough in the small stuff to pay the expense of clearing.

OLD TREBURGETT.—W. Hancock, W. T. Bryant, Feb. 11: Since our last report we have communicated to the 80 south with the No. 2 winze sunk under the 70; this has well ventilated the former. The men are now squaring down the ground preparitory to driving on the end. Other places are much the same as last reported. We sold to-day two parcels of silver-lead ore; No. 1 computed 8 tons, at 24*l.* 12s. 6d. per ton.

PARYS MOUNTAIN.—T. Mitchell, Feb. 11: We have no change of any importance underground this week. There is a little copper ore showing in the 65 cross-cut, and the ground is looking promising. We are getting on very well in cleaning up the precipitation pits, also with the surface work generally.

PEDN-AN-DREA UNITED.—W. Tregay, W. Prideaux, J. Pope, Feb. 6: Sump: We have forked this week the water down to 3 fms. below the 100 fm. level. Next week we purpose dropping a lift from there to the 120, when we expect to regain that level without much delay.—Cardozo's: In the 90 west end the lode (north) is worth 15*l.* per fathom. In the 80 west end the lode (north) is worth 16*l.* per fathom. In the 70 west end the lode (north) is worth 18*l.* per fathem. In the 60 west end the lode (north) is worth 12*l.* per fathom. In the 55 west end the lode (north) is worth 10*l.* per fathom. In the 47 west end the lode (north) is worth 8*l.* per fathom.—Trevena: In the 47 north cross-cut nothing of importance has been intersected here since last reported. The branches intersected some time ago, and now being wrought, are worth quite 20*l.* per fathom.—Critchley's: In the 30 we are sinking again, and the water having very considerably fallen off we expect to make improved progress. In the 90 rise we are making rather better progress here than for some time past, and hope to still further improve this. No other changes to report.

PENHALLS.—S. Bennetts, Wm. Higgins, Feb. 6: Both the 70, east and west, ends continue to produce low-quality tinstuff. The 60 east is unproductive. A stope in the back of this level is worth 6*l.* per fathom. The 50 north is without change. Three stopes in the back of the 50 east are worth respectively 12*l.*, 10*l.*, 11*l.* per fathom. The 50 west end looks very promising, and is at present worth 15*l.* per fathom. The 45 east is worth 10*l.* per fathom, the 40 west 6*l.*, and the 30 east, on the north part of the north lode, 6*l.* per fathom.

PENNERLEY.—W. T. Harris, J. Delbridge, Feb. 10: The lode in the 130 west is 1 ft. wide, composed of carbonate of lime, intermixed with a little lead ore; the ground is favourable for progress. The lode in the 120 east is still twitched, but indications are more encouraging. The lode in the 100 west, on the east and west lode, is 1½ ft. wide, worth 1 ton of lead per fathom. The 80 east shows more favourable, the ground is easier for driving, and a little water is issuing from the forebreast. In the 60 a cross-cut is now in progress to intersect the north lode just under the course of lead gone down in the bottom of the 40. The lode in the winze sinking below the 40 is worth 1½ ton of lead per fathom. The rise in the roof of this level is producing 2 tons of lead ore per fathom. The ground in the cross-cut driving south in the 20 is more favourable for progress.—Potter's Pit: We have commenced the sinking below the 65, and shall make all speed in reaching the 75. The lode in the 65 west is less productive than last week; this we think is only temporary, as we cannot be far from the rich bunch of lead gone down in the level above. The lode in the 55 east is producing some good stones of lead, and very promising for an improvement. Nos. 1 and 2 winzes, sinking below this level west, is worth 80*l.* per fathom each. The stopes are yielding the usual quantities of lead.

PENSTRUTHAL CONSOLS.—W. Teague, Feb. 10: We have sunk but a few feet in Highburrow shaft during the past month, the men being engaged in fixing new plunger-lift at the 34, which will be completed to-morrow; the lode is still worth 20*l.* per fathom, and of a most promising appearance. We shall make greater progress in sinking the shaft now the plunger-lift is fixed. At the 34 fm. level, driving west of Highburrow shaft, the lode is worth for tin 10*l.* per fathom. In the 34, driving east of Highburrow shaft, the lode is worth for tin 20*l.* per fm. In the 22, driving west of Highburrow shaft, the lode is worth for tin 8*l.* per fm. In the 10, driving west of shaft, the lode is yielding good stamping work for tin, and is of a most promising character. The weather has been most disastrous,

ally interfering with all our surface operations, but I hope the worst is past, at all events there is promise of it at present. I consider the prospects still good for opening out a good mine here. We shall sell from 3 to 4 tons of tin again to-morrow. This will be our second sale for the month, and if we get a little better weather I hope our tin sales will increase.

PLYNLIMMON.—John Garland, Feb. 10: New Shaft: The sinking of this shaft has been commenced below the 24, and will be pushed on as fast as the nature of the work permits. The 24 is still in the hard bar of ground mentioned in my last report, but shows indications of soon getting through it. In the 12, west of engine-shaft, the lode continues small and unproductive. The cross-cut, north of the 12, is passing through cross-heads, on which spots of lead are occasionally seen; this looks as if the lode were near at hand. The stopes are looking much the same as for some time past, producing fair quantities of lead ore. The machinery throughout the mine is in fair working order, and drawing and dressing are being kept on as fast as possible. I am sorry to say that since the cessation of the late incessant rain frost has set in, which has completely put a stop to all slime-dressing.

PORT NIGEL.—J. Manley, Feb. 10: The engine-shaft is now sunk 8 fms. 2 ft. below the 44. The lode has been undergoing a change for the better during the last 6 ft. sinking; it is large, and carrying a leader from 6 to 8 in. wide, a good mixture of sugar-spar, and spots of copper and blende, with saving work for lead ore (carrying a flookan) on the south wall. I feel persuaded that the next level will open out large quantities of lead ore. The 44 is set to drive east by four men, at 8. per fm.; lode promising, yielding good stones of lead ore. The stope in back of the 44 east is set to four men at 4l. per fathom; lode worth 35 cwts. of lead ore per fathom. The stope in the sole of the 34, east of Stephen's winze, is set to four men, at 4l. 5s. per fathom, worth for lead ore 30 cwts. per fathom. The stope west of Stephen's winze is set to four men, at 4l. per fathom; worth 30 cwts. of lead ore per fathom. From present appearances I consider the prospects of the mine very encouraging. I shall send out samples of 40 tons of lead ore, for sale on the 15th instant.

PRINCE OF WALES.—J. Gifford, J. Pryor, Feb. 9: In the 77 east the lode is 2 ft. wide—poor. In the 65 east no lode taken down since last report.—Tribute Department: The pitches throughout the mine are not looking so well as for some time past.—Silver Lode: In the cross-cut north at the deep adit level there is no change to notice, the water still continues from the bottom of the end.

PRINCE OF WALES.—J. Gifford, J. Pryor, Feb. 11: In the 77 east we have met with a change of ground both in the country and lode, the former being a very light clay-slate; the latter is 2 ft. wide, composed of a mixture of prian, flookan, and sulphuric mundic, and letting out much much water.

ROMAN GRAVELS.—A. Waters, Feb. 11: The principal points—the ends north and south of south of the old engine-shaft, and those south of Corfield's—are going forward in a strong wide lode, and yielding 4 to 6 tons each. Nothing new in the stopes for the last week or two. The new south engine-shaft is 6 fathoms below the 65. The new adit is now within about 13 fathoms of the said shaft. Surface work going on satisfactorily.

SOUTH BWADRAIN.—Sydney Roberts, Feb. 8: Since my last report we have completed our drawing machine, with line of pulleys leading to the engine-shaft, also the line pulleys for pumping; have attached them, and find all to work admirably—in fact, nothing could be wished for better. We are now in course of sinking the engine-shaft and cutting tip-plat under the 12, where we find the lode to improve daily, containing very rich blende and lead ore; and there can not be a doubt to anyone practically acquainted with tin mining in this county that the latter will soon displace the former, and make great deposits of lead ore. In the 12, driving west, the lode is about 6 ft. wide, rich in blende and a good mixture of lead ore. In the shallow adit, driving east on the middle lode, it is about 3 ft. wide, and as we proceed it improves rapidly, and is yielding excellent lead ore; this may be regarded as a new discovery, and a most important one, for we have over 50 fms. of high ground over this end, and as we advance this will rise rapidly until we gain 150 fms. of backs; in fact, our prospects are good at all points, and there is not a doubt of our opening out immediately one of the best mines in Cardiganshire.

SOUTH CONDURROW.—Wm. Rich, Wm. Williams, H. Abraham, Feb. 9: We have put in tramroad in the 93 cross-cut south, and hope soon to clear the level to the end. The 82 end, east of cross-cut, is worth 12l. per fathom. The 82 end west is worth 30l. per fathom. The 70 end west has a very promising appearance, now worth 10l. per fathom. The 70, east of winze, is worth 8l. per fathom. The rise in back of the 70, towards Vivian's shaft, is poor. The 60 end west is worth 6l. per fathom. The 60 end east is worth 7l. per fathom, and the ground easier for driving. There is no new feature in the 60 cross-cut north.

SOUTH DARREN.—John Boundy, W. H. Boundy, Feb. 9: Setting Report: The 90 to drive west, by six men, at 13l. 5s. per fathom; the lode is 2½ ft. wide, worth for lead and copper ore 15l. per fathom, and presents a very promising appearance. To stope the back, over the 90 west, by six men, at 85s. per fathom; the lode is 3 ft. wide, worth for lead and copper ore 14l. per fathom. The 80 to drive west, by six men, at 10l. 10s. per fathom; the lode is 2 ft. wide, worth for lead and copper ore 10l. per fathom, and has a most promising appearance. To stope the back over the 80 west, by four men, at 80l. per fathom; the lode is 2 ft. wide, worth 11l. per fathom. To stope the back over the 80 west, from the winze, by six men, at 85s. per fathom; the lode is 2½ ft. wide, worth 14l. per fathom. The 70 to drive west, by four men, at 10l. 10s. per fathom; the lode is 2 ft. wide, composed of blue slate, spar, copper, and lead ore, worth 11l. per fathom, altogether a very promising looking lode. To stope the back, over the 70 west, by eight men, at 100s. per fathom; the lode is 3 ft. wide, worth 14l. per fathom. To sink a winze below the 60, by six men, at 13l. per fathom; we have here about 3 ft. more to reach the 70, which, when completed, will ventilate the level, and open out ground for stoping. To stope the back, over the 70 east, from the winze, by two men, at 75s. per fathom; the lode is 2 ft. wide, worth 7l. per fathom. Surface work is being pushed on as fast as possible.

SOUTH ROMAN GRAVELS.—J. W. Powning, Feb. 11: Shelfield: No material change has taken place in the underground department during the past week. The sinking of engine-shaft is progressing favourably, will send a full report next week.

SOUTH TOLCARNE.—J. Vivian and Son, J. Paull, Feb. 11: In the 30, east of engine-shaft, we continue to meet with some rich copper ore, but the lode is thus far small, averaging about 1 ft. in width. In the 30, west of engine-shaft, the lode has not altered materially since our last report. In the 20, west of engine-shaft, the north west caunter branch continues its course as before reported, and the rock adjacent to it is becoming more spary, from which we hope soon to meet with a junction with another branch or lode.

SOUTH WARD.—R. Goldsworthy, Feb. 10: The dividing, casing, and footway in Thomas's engine-shaft is completed down to the 90, and the men now engaged in cutting plat, which we hope to finish in a fortnight. In the 72 cross-cut we have just cut the North Hooe lode, which is 2 ft. 6 in. wide, composed of capel, spar, and mundic, and letting out water freely. Having only just left the cross-course the lode is unproductive for lead, but as the end is extended south no doubt we shall have a good improvement. No other change to notice.

ST. AGNES CONSOLS.—Wm. Vivian, Feb. 11: In the 72, driving west, on the flat lode, the lode is improving as we advance, and is 3 ft. wide, producing rich stones of tin and copper ores. From the present improved appearance of the lode I think we shall shortly find it such as to give us satisfaction, and afford the realisation of some of those expectations which we have been entertaining at this point. In the 72 cross-cut, driving north of the engine shaft, we have about 2 fms. to drive north to reach the junction of the flat lode and Wheal Rock lode. This we consider a very important point, as the flat lode continues to improve as we advance. There is no change to notice in the engine-shaft since last week.

TANKERVILLE.—Arthur Waters, Feb. 9: I have to-day thoroughly examined the mine from top to bottom, and now beg to submit the following report thereon. The 152 or bottom level is driven west of Watson's shaft on main lode 13 fathoms, on a vein averaging 5 ft. wide, composed of carbonate of lime and both steel and soft flaky lead ore, worth for the whole distance 60l. per fathom. The lode in present end is of a very masterly character, well charged with ore, and we feel certain that the next 10 fathoms driving will put us into the junction, where, at a corresponding point, the 140 became so rich, and where, at this level, we shall also find a very rich course of ore. Considering the 13 fathoms of productive ground already driven through, and the great run of ore still before us here, no words of mine are necessary to show that the mine is neither exhausted nor cut out in depth. The winze from the 140 to the 150 being holed, a good section of ore ground is available and entered upon as follows: Stope in back of the 150, west of rise, by six men, at 7l. per fathom; lode worth 4 tons per fathom. Stope east of ditto, by six men, at 7l. per fathom; lode also worth 4 tons per fathom. The 140 is driven west of shaft 23½ fathoms, in a lode varying from 2 to 6 and 12 tons per fathom. There is a fine course of solid lead ore to be seen along the bottom of the 140, which reminds me of the run of lead we had in the 74, and which was the top of the deposit the shaft was sunk in, and where, you remember, the yield at times came up to 80 tons per fathom deep. It is impossible to say what the upshot in present instance will be; still, I do believe the bottom of the said 140 should be looked upon only as the outcrop of another great run of lead ore. The lode in present end, and west of cavity, is divided into three parts, which together are 5 ft. wide, and cut up into good orey stuff. There is every indication of the parts uniting again as the end advances, and we see no reason for supposing that a similar deposit of ore to that passed through is not near at hand. No. 1 stope, in back of the 140, west of winze, by four men, at 7l. per fathom; worth 4 tons per fathom. No. 2 stope, west of ditto, by six men, at 7l. per fathom; worth 4 tons per fathom. No. 3 stope, west of the latter, by six men, at 7l. per fathom; lode worth 6 tons per fathom. Stope in same level, east of winze, by four men, at 7l. per fathom; worth 3 tons per fathom. I would remark here that the lode in the roof of the 140, west of winze, and now being worked upon in the three stopes (Nos. 1 to 3) mentioned above, is standing on the north side of and behind the workings in the 130 fm. level. We should cross-cut to it now, were it not that the ground is being proved by the coming up of the stopes one after another, and the whole thing will be laid bare in regular course, without adding to our monthly cost and staff in spurts. We are cutting into the new discovery in the 130, where the lode is going above the level and behind the workings in the direction of the engine-shaft; four men are working at this at 7l. per fathom, lode worth 5 tons per fathom. The 120, west of shaft, is driven altogether 14½ fms., the whole distance in a lode worth 2 tons to 3 tons per fathom. A winze is being sunk to the 130, close up to the 120 end, by four men, at 15l. per fathom, in a lode worth 4 tons per fathom. This is the ore ground, as I said before, that is standing behind the 130, west of winze. The stope in the back of the 120, west of shaft, by four men, at 7l. per fathom; lode worth 2 tons per fathom. No. 2 stope, west of ditto, by four men, at 7l. per fm.; lode worth 3 tons per fathom. The 120 cross cut north, by four men, at 15l. 10s. per fathom: this cross-cut is now 17 fms. 2 ft. north from main lode, has passed through six lodes, and is now, judging from appearances, near to another vein or lode. We shall extend the cross-cut to the shale before turn-house to prove the lodes already discovered. The 110 west is 10 fms. 2 ft. from shaft, and has been suspended for nearly a year, but having traced the new ore ground from the 152 to the 140, 130, and 120, we feel persuaded that it will be found behind the said 110 also. The branches, strings, and water oozing out of the side of the level (which were the guides in the levels below) are very marked here likewise, and the ore cannot be far off. Due attention will be given to the matter. The stope in the back of the 110, west of shaft, by four men, at 7l. per fathom; lode worth 3 tons per fathom. The 100, west of shaft, is driven 14½ fms., and suspended under analogous circumstances to those in the preceding levels. We are sinking a winze below the said 100, on a lode which we think is connected with the new discovery under consideration, and which thus far is opening out well; set to four men, at 15l. per fathom; lode worth 3 tons per fathom. This ore is, we consider, standing whole to the 74, as well as in all the levels downwards. The 92, west of shaft, is driven 17 fms. 2 ft. 6 in., and suspended until we shall have traced our way link by link from the levels below, and be satisfied that we are not leaving bunches of ore on either side of the level. We shall afterwards go ahead as before. The late end men here are engaged cutting into the south side of the level, about 5 fms. behind the end, where the lode is strong and wide, charged with the usual matrix, and worth 3 tons of lead ore per fathom. This run of ore is whole above as well as below the said level. The 82 is driven west of shaft 13 fms. 2 ft. 6 in., and suspended under circumstances, and for the same reasons as explained in connection with the 92. The late end men are, therefore, cutting into the south side of the 82, behind the end, on a lode of considerable width, and worth, as far as we have gone, 3 tons of lead ore per fathom. This is also in whole ground above and below The 74 west is driven 11 fms. 4 ft., and suspended, as were the deeper levels. The men are cutting into the lode south from the bottom of No. 1 winze, and good lead stuff is already in sight. We expect to get into a strong productive lode here, and shall then push on to effect a communication with the roof of the 82, so as to have the ground properly in hand for stoping. We are also making two or three other trials with seven men shooting into the sides of the 74, 140, and 152, but not being permanent bargains need not be particularised in this report. We have been making profits for several months past (no doubt the directors' statement will show to what extent), and as the returns will be increased to 130 tons after the sampling 100 tons on Thursday, our profits on the increased quantity will, no doubt (the price of ore keeping up) be 600l. to 700l. per month. I beg to say, in conclusion, that our monthly raisings at and about the date of the last annual meeting did not come (clear) up to 70 tons per month, but I may say that they have been increased to 130 tons per month at this date. And the prospects of the mine to-day are of a character that holds out greater things over and above the present returns than could be seen in August of last year, when the annual report was written.

— Arthur Waters, Feb. 11: The 152, west of Watson's shaft, has improved a little since yesterday, and there is every prospect of its getting into a rich lode forth with. Other points as when reported on the day before yesterday. We have to-day sampled 100 tons lead ore, for sale on the 18th inst.

TEESDALE.—Wm. Vipond, Feb. 4: I was over to see this yesterday, and find the end north from Whimsey shaft about as usual for driving; it is, perhaps, yielding 10 cwts. of ore per fathom; the ore is not lying in any rib or body, but mixed up in the stone or rider, consequently it makes very little show. The stope south of shaft is yielding about the same, and presents very much the same appearance every way. Hopkin's level is now through the worst part of the ground, and about 3 fms. more will bring it to where it will require very little done at it, except walling and arching up to the sill or rock.

TREGARDOCK.—J. and T. Spargo, Feb. 11: We have taken down part of the lode in No. 1 stope in the back of No. 2 adit; the part taken down is good work for silver-lead, and from what we can see the remainder standing is just as good as that taken down. We have a good piece of lode desued at No. 2 stope in the same level. We shall commence taking down this piece of lode on Monday. The lode in the junction shaft is still holding down good, equal to my last report, and judging from present indications it is more than probable our sanguine expectations, as the shaft deepens, will be verified. The wheel and crusher work well, and we are getting on with our dressing, and laying out our floors as fast as possible; and shall open on two other stopes in the back and bottom of No. 2 level as soon as the lode is taken down in No. 2 stope, so as to put in a stull to keep up the deads.

TRELEIGH WOOD.—E. Hosking, W. Goldsworthy, Feb. 10: We have drawn up the 12 in. lift from the 44 fm. level, and intend dropping the 16 in. lift to-morrow; and should we have good speed we hope to get the water out so that the men may be able to work in the bottom level by Monday next. There is no change in the stopes since our last advice. Friday next being setting-day, we will send on a full report on Saturday.

TREVARRACK.—James Pope, Feb. 10: No change to notice in the engine-shaft since last reported, the lode is still 2 ft. wide, producing stones of tin. In the 74 east the lode is 2 ft. wide, producing tinstone of low quality. In the 74 west the lode is 1 ft. wide, composed of peach, mundic, and spar, with stones of tin. In the 60 east the lode at present is small, and unproductive.

TYLLWYD.—J. Paull, Feb. 11: All the bargains are about the same as stated in last week's report. We have a little frost, which rather impedes the progress of the masonry at the crusher-house; however, we are getting on with all our surface work as fast as possible, and hope by the end of April to be able to have a parcel of ore ready for market.

VAN CONSOLS.—J. Roach, Feb. 11: Cutting plat, fixing penthouse, &c., at the 25 will be completed in about a week hence, when sinking of main shaft will be continued to a 40 fm. level, from which a very short cross-cut will reach the lode; at this depth we anticipate finding it very productive for lead ore. The lode in the 25, driving east of main shaft, is composed of highly congenial matrix, which contains lead and stones of blende; this will be communicated with the level from No. 0 winze some time during the present month. The winze sinking under the 25, west of No. 2 winze, is in a fine lode, with lead ore throughout; the present yield is 3½ tons of lead per fathom. Indications are in favour of much further improvement in value, as the winze is deepened; the dressing of ore is being pushed forward, and shall soon have another parcel for market. All surface operations going on as usual. Barytes mills are regularly at work, which will enable us to manufacture and sell large quantities of levigated sulphate of barytes monthly, as well as native carbonate of barytes at a good profit.

WEST ESGAIR LLE.—R. Harvey, Feb. 11: The different points in the eastern mine are looking quite as encouraging as last week. The tributers have not yet finished dressing their ore, the frost for the past week being rather against them. The tribute pitch in back of the 10, in the western mine, is looking remarkably well, and the men are earning good wages; we shall commence dressing their ore in the course of a few days. There is no material change in the 37 cross-cut south, with the exception that the men are making better progress. The machinery in both mines is in good condition, and working well.

WEST GODOLPHIN.—J. Pope, Feb. 9: Setting Report: Caunter Lode: The 60 south is driving by six men, at 8l. 10s. per fathom. The 60 south is stoping by two men, at 3l. per fathom. The 60 north is driving by six men, at 7l. per fathom. The 50 south is driving by two men, at 9l. per fathom. The 50 north is driving by two men, at 4l. 10s. per fathom. The 40 north is driving by two men, at 5l. per fathom. Vivian's shaft is sinking by six men, at 12l. per fathom. The 20 south is driving by four men, at 6l. 10s. per fathom.—Wilson's Lode: The 40 east is driving by six men, at 4l. per fathom. The 30 east is driving by two men, at 2l. per fathom. The 20 east is driving by two men, at 2l. 15s. per fathom. The 10 east is driving by two men, at 4l. per fathom. The deep adit east is driving by six men, at 4l. per fathom. One pitch is let on tribute to four men, at 5s. in 1l.; three to nine men, at 6s. 8d. in 1l.; one to four men, at 8s. in 1l.; and seven to 19 men, at 10s. in 1l. Standard, 50l. per ton for tin.

WEST MARIA AND FORTESCUE CONSOLS.—Wm. Skewis, Noah Coward, Feb. 11: West Maria Lode: No lode has been taken down in the 104 since last report, the drivage having been carried on by the side of it. We shall have it taken down in a few days, and hope there will be an improvement. The lode in the 93 west has been taken down as far as cross-course, and is about 4 ft. wide, composed of quartz, capel, mundic, and good stones of copper ore. The men will at once cut through the cross course, and resume the drivage by the side of the lode. The stopes throughout the mine are without material change.

WEST MILWR.—W. Francis, Feb. 10: We continue to intersect the east and west joints in driving the cross-cut south from West Meadow shaft, with a little lead ore and blende, and with other favourable indications in the most productive-bearing measures.

WEST TANKERVILLE.—A. Waters, Feb. 11: In cutting plat at the 63 we have just got into a strong carbonate of lime, lode mixed, with which there is lead ore, worth about 1 ton per fathom; this makes the third portion of the lode seen at this level, and it would now seem that the ore ground seen by the shaft at the 46 and 50 fm. levels has dipped south through the shaft somewhere above the 63, and that we shall have to go south in this level to the junction of the said division of lode before we get into the bunch ore again; 3 to 5 fms. will reach the point in question. The stope in back of the 50, north of winze, is worth 1½ ton lead ore per fathom. The stope in same level, south of the winze, is worth 2 tons per fathom. The winze below the 46, near the shale, is worth 3 tons lead and 2 tons blende per fathom; ground favourable for progress. The 46, north of junction, on No. 2 caunter, is worth 1 ton lead ore per fathom. We have to-day sampled 20 tons lead, for sale next Thursday.

WEST WHEAL TOLGUS.—Feb. 9: The water is not out for the bottom level men to work. On Saturday Taylor's engine was only idle 2¾ hours, the buckets changed, and other things done with good dispatch, and on Sunday the water was down in the 125, but the shaftmen seeing the third main rod from surface had opened a little in the joint between that one and the fourth they stopped the engine, and found that some of the pins were broken; several of the pins had to be taken out and replaced by new ones, and to make it safe they put on some strong staples. The water is now 2 or 3 fathoms above the 115, we are forking very well, but it will take a couple of days more to get it out. There is not much alteration since our report of the 4th. We estimated the 95 end in our last at 2 tons per fathom, we now call it worth 1¼ ton per fathom, but think before long it will be much better. The men are now cutting in kil"as on the north side of the lode, which we are glad to say is now softer and lighter; this we think looks kindly for the lode. The 85 winze is still worth 10 tons per fathom; it is a fine lode, and we think it is improving. Richard's shaftmen are cutting ground for more stays for the large lifts, putting in pulleys, &c., whilst the men from the 40 end east are driving a cross-cut to unwater the 40 bob-pit. We are close up to another sampling, but can hardly say how much ore will be ready by Tuesday next, but it will be over 200 tons.

WHEAL ARGUS.—T. Trahair, Feb. 11: Having now more water for stamping, I purpose increasing the number of tributers, and hope to report better results than I have of late from the burrows, and at a decreased cost for stamping and dressing.

WHEAL CREBOR.—J. Andrews, Feb. 10: There is no change in the 120 east. The lode in the stope in the back of the 120, east of rise, is worth 25l. per fathom. The lode in the stope in the back of the same level, west of rise, is worth 15l. per fathom. The lode in the 108 east is 18 in. wide, composed of capel, quartz, and mundic. The lode in the 72 east is 3½ ft. wide, and of much the same character as it has been for several fathoms driving. In the 48 east the lode continues large, and yields mundic and yellow copper ore, but not sufficient to value.

WHEAL GRENVILLE.—E. Hosking, W. Bennetts, Feb. 6: We are slowly forking, and as the weather has been more favourable the last three or four days we hope to do better in the coming week. The men are making good progress in the 130 cross-cut, north of new shaft, and the ground is very favourable. No change has taken place in the 130, north of north shaft. The lode in the 130, east of north shaft, is 18 in. wide, and yielding saving work. The lode in the winze below the 120 east is 18 in. wide, producing saving work. The stope above the 120, east of north shaft, is worth 8l. per fathom. The stope above the 120, west of rise, is worth 10l. per fathom. The stope below the 110 east is worth 9l. per fm.

WHEAL GRENVILLE.—E. Hosking, W. Bennetts, Feb. 11: The water is now down in the 140 level, and we hope to set the end and stopes to-morrow. There is no change in any of the bargains since our last.

WHEAL KITTY (St. Agnes).—S. Davey, J. Williams, Feb. 6: New Shaft—Pryor's Lode: We have done but little in this shaft during the week, the water being in from having a long stop to put in the new bob, which is working well, and the water in fork throughout the mine. The lode in the 142, driving west of shaft, is 4 ft. wide, and worth for tin 7l. per fathom. The ground in the 142 cross-cut south is much harder, and letting out water freely, which indicates our nearing the lode.—Caunter Lode: In the 142, driving north, no lode has been taken up during the week. The lode in the 130, driving west of shaft, is worth for tin 20l. per fathom. In the 130, driving east of shaft, the men are desuing the lode. The lode in the winze sinking below the 130, west of shaft, is worth for tin 8l. per fm. The lode in the 118, driving west of shaft, is worth for tin 17l. per fathom. The lode in the 20, driving east of shaft, is poor. The lode in the 90, driving east of sump, is presenting a kindly appearance for the production of tin. The lode in the north adit level, driving west of eastern boundary, still maintains its size and character.

WHEAL PEEVOR.—Feb. 9: We have this day inspected the above mine, and we consider the prospects of the mine exceedingly good—in fact, it is the best tin mine for the extent of ground opened on that we have seen for a very long time. The engine-shaft is sunk to the 60 through a lode varying from 5 to 8 ft. in width, and has opened out a very valuable piece of tin ground. The 60 east is being driven by six men; lode 5½ ft. wide, and worth 30l. per fathom. We are of the opinion that there is still more lode standing to the north of the present level. There is also a good lode at the 60, west of shaft—in fact, of pretty much the same value as in the eastern end. The lode in the 48 is driven west of engine-shaft fully 30 fathoms, and has laid open an excellent piece of ground for stoping; in the present end, however, by cutting north a very rich lode of tin has been discovered, seen for about 2 ft. in width, but not yet cut through, worth for the width in sight 40l. per fathom. This is the more important, as it may be looked on as a separate shoot of tin from that laid open in the engine shaft in sinking from the 48 to the 60. The stope in the bottom of the 48, west of shaft, is worth 45l. per fathom. There is also about 40 tributers at work earning fair wages. Looking at the new discovery in the 48 west we would recommend that the 28 and 36 west be driven at once, as we believe that some excellent tribute ground would be soon laid open.

WHEAL RUSSELL.—J. Bray, Feb. 11: We have no improvement in our tut-work since last report. The lode in the stopes throughout is very good. Our sampling for last month was 106 tons. This month it will be 100 tons.

WHEAL UNY.—W. Rich, M. Rogers, W. Rich, jun., Feb. 6: We are nrging on the sinking of Hind's engine shaft by nine men, as fast as possible. We have to sink about 12 ft. deeper before we can fix bearers and cistern to take new plunger-lift. We have not been able to work in the 160 during past week on account of water. We are making good progress rising in the back of the 150 towards incline-shaft. The 150 end, east of Goodinge's, is unproductive. The 140, east of King's, is worth 10l. per fathom. The 140, west of incline shaft, is worth 12l. per fathom. We are cross-cutting through the lode in the 130 west. The 130 end, east of King's, is worth 14l. per fathom. The 120 east is worth 15l. per fathom. The rise in the 120 west is worth 10l. per fathom. The 110 east is worth 8l. per fathom. The 100 east is worth 7l. per fathom. The 40, west of incline, is worth 6l. per fathom. and ground easy for driving.

WILLOUGHBY.—H. Nottingham, Feb. 10: New Lode: The 23, driving south, is gradually improving; the bottom of the level is worth 1 ton per fathom; our progress is very slow at present, the ground being extremely wet. I am expecting to have some change daily. The rise going up behind this end is not quite so good for lead, worth 25 cwts. per fathom. The stope in back of the 23 is worth 15 cwts. of lead per fathom. The stope going south of winze below the 13, is poor for lead; we have reached the end for the first course of lead we had on this lode, and by the appearance of the end to-day I believe we are about to enter into the same run of ore ground the 23 level has passed through.—Goddard's Lode: The stope in back of the 23 south is yielding from 1 to 1½ ton of lead, and the same of blende to a fathom. Since my last report the stope below the 13, north of winze, is worth 25 cwts. of lead and 1½ ton of blende per fathom. The 13, driving south of No. 2 shaft, has entered into a good run of ore. The same we have in the bottom of the No. 3, but much better, thus showing that we are only on the top of it; for the length opened on it is worth 2 tons per fathom, the bottom of the level still being the best; this is in new ground, which adds much to its value. The stope going south of No. 3 and No. 4 shafts are without change. We shall sample 15 tons of lead the end of this week, and we have near 20 tons of blende dressed, which we shall soon make up to 30, and then sample it.

WHITEHAVEN IRON MINES.—T. Rosewarne, Feb. 9: I beg to hand you report of progress made for month ending Jan. 30: No. 1 drift has been driven 7 fms. 9 in., by four men, at 2l. 5s. and 2l. per fathom; the ground is still soft for driving and the lode is a little improved. The side vein in No. 1 drift has been driven, by one man and one boy, 6 fms. 2 in., at 2l. 15s. per fathom; the lode will yield about 9 tons of ore per fathom. The rise in back of No. 2 drift has been put up 6 fms. 1 ft. 6 in., by six men, at 6l. per fathom; this has been holed to No. 1 drift above, the ground secured, and a footway put in to improve the working of the mine. In the intermediate drift, between No. 1 and No. 2, we have cross-cut the lode 2 ft. 8 in., by two men, at 7l. per fathom, and have reached the footwall, where the lode is very good. No. 3 drift has been driven 3 ft. 11 in., by two men, at 8l. per fathom; the lode is looking better for ore than it has done for some time past. No. 4 drift has been driven 6 fms. 1 ft. 5 in., by six and four men, at 6l. 10s. and 5l. per fathom. The lode has not been quite so good as when last reported on, but by stripping down the eastern side of the level a vein of ore about 3 ft. wide, of the best quality, bearing towards the main lode, has been discovered; and I have reason to believe that when they meet (which will be in about 4 or 5 fms. more driving) they will make a large body of ore. No. 5 drift has been driven 1 fm. 4 ft. 8 in., by four and two men, at 12l. and 9l. per fathom; the lode is promising. No 2 drift (Ban Garth) has been driven 2 fms. 4 in., by one man and one boy, at 7l. and 6l. per fathom; the lode is strongly impregnated with ore, and we are expecting a change for the better here soon. The timberman, with one man and one boy, is repairing the stulls and putting in shoots in No. 1 and 2 midway drifts. The ore carted to Drigg and to the railway at King of Prussia Bridge during the past month was 152 tons 19 cwts. 3 qrs.

ECHOES FROM THE MINING MARKET.

The market for tin shares has again been adversely affected by a decline in the Cornish standard. But little explanation can be given why such a movement was necessary—it is one of those inscrutable changes the necessity for which is known only to the smelters. This irresponsible body of merchants appear to follow no defined rules of trade, but simply the bent of their own inclinations, raising or lowering the standard as it suits them; and, however satisfactory the result may be to them collectively, by the mining community in the county and adventurers throughout the kingdom their proceedings are regarded with the greatest amount of dissatisfaction. Every week we hear more and more of the proposed scheme by which our leading mines shall melt their own produce, and there is no doubt that unless the smelters concede something, by making their changes more in unison with the state of the market, some such combination will be formed. The miner is now so entirely in the hands of the smelter that he is forced to accept as a basis of calculation whatever he may be told is the standard on the day he takes his bags of ore to the receiving-house; and, as the smelting trade is in but few hands, and those very powerful, with an unlimited supply of capital, remonstrance is useless. It is true the mine manager may stock his tin, but at the best the result of such a proceeding is more or less a matter of chance, and the average experience of those who have taken this course is not sufficiently encouraging to induce it to be generally followed. A mine, too, which stocks its tin must be financially strong, otherwise it could never afford to have so much working capital lying idle; and as Cornish mines, as a rule, are not celebrated for large monetary reserves—the prosperous ones generally dividing their profits pretty closely, and the others being chiefly dependent upon their monthly sales of ore for the discharge of their current costs—the difficulties to be encountered more often outweigh the prospective advantages of a rise accruing from stock being withheld. Turning to the London market, we find that a fair business has been done, with very little change in quotations. Straits tin is about 91l. 10s. to 92l., and Australian 30s. to 2l. under these prices. The large consumption of last year, amounting to more than 27,000 tons, at about present existing values, is thought to indicate that recent additions to stock will not affect the market, especially as the additions referred to have not been unexpected. Supplies from Australia have materially decreased, the increase having come from the Straits settlements, and it appears likely we shall have augmenting imports from this quarter. The stock of foreign metal in London on the 1st inst. is estimated to have been about 3950 tons.

The copper market has been rather inactive, but the demand, on the whole, has been fair. Prices are, however, in rather an uncertain condition, and would be easily influenced by any decrease in supply, or increase in consumption. Lead is dull, but those interested in lead mines are not complaining of any particular fa in the value of their produce.

The condition of the lock-out in South Wales is absolutely without change, and we appear as far off as ever from a satisfactory solution of the difficulty. As prices are favourably influenced by the stoppage of supplies from this district, colliery undertakings elsewhere continue to benefit by the extra demand upon them, and shares have become firmer. Iron shares are dull, with a weaker tendency. The proposed new line through the Cleveland district in opposition to the North-Eastern Railway, whose charges for freight have long been considered oppressive, will, if carried out, greatly aid in the development of the immense ironstone beds of this only partially-worked district. The proposed undertaking is very powerfully supported, and in all probability will soon become an accomplished fact.

During the past three or four weeks a heavy demand has set in for chemical shares, and prices are consequently much higher than they were. Of this decription of security Lawes have been in prominent request at 5½ to 6. In tin shares Dolcoaths have been in good demand all the week in consequence of favourable reports. Carn Brea have declined upon the publication of the accounts mentioned in our last. The disappointment at no dividend having been declared at the meeting appears to have been very general. The shares are now at 53l., whilst not many months since 180l. could not purchase them. Crenver and Wheal Abraham Mines are getting well over their water difficulty, and sold a few days since tin and copper ores to the value of 1926l. 10s. It is expected that good sales of tin will now be regularly made. East Pool shares are quoted 12 to 13. The mine is stated to be looking well, but stamps are much wanted. It is stated that some of the richest tinstuff is sold in the stone, which must be a loss to the adventurers. Old Treburgets are being steadily purchased by investors at present low prices. Seven stopes in this mine are valued at 56l. per fathom, and two ends and a winze at 33l. per fathom.

The water at Pedn-an-drea remains at the 100 fm. level, the engine doing just sufficient duty to keep it from rising beyond this point. The ends above are valued at 98l. per fathom. Treleigh Wood, which a week ago had reduced its depth of water to 8 fms., is now in fork again. At Rosewall Hill the floods have made a serious difference in their returns of tin, but there is a good lode in the new flat-rod shaft, which is valued at 30l. per fathom. We hear some talk of a dividend at the next meeting of South Condurrow, but at present it is decidedly premature. The water is comparatively easy here, and the shares have been in good demand at 5 to 5¼. St. Just Amalgamated is in fork. The pumping at West Seton is proceeding slowly, and the mine is not likely to be drained for some time. At Wheal Grenville the water is now below the 130, but at Wheal Uny it is reported to be very troublesome. An important discovery has been announced from West Frances. A rich tin lode has been cut into 4 ft., and it is believed to be the great lode of West Basset. The discovery has had a very good effect upon the shares, and if the lode turns out to be what it is expected they will have a considerable rise.

A good report is announced from Wheal Peevor, and the stock has also become firmer. This mine is now making excellent progress.

Chapel House shares continue to be in demand, and a great number have been dealt in during the past few days. Everything is reported to be going on well at the colliery, and the output is daily increasing. The shares at present can be purchased, cum div. (3s. 9d. per share) The Thorp's Gawber Hall directors have announced a dividend of 15s. per share, which is the amount we stated in these columns as most likely to be declared. A good deal of attention has been drawn to the last paragraph of the notice convening the meeting, which states that the directors propose "to consider the expediency of raising capital by loan or debentures to replace the existing debt." We understand that this refers to a sum of 20,000l. borrowed by the directors to avoid a further issue of shares at the time, and to arrange financially the due payment of former dividends. The operation may prove to be legitimate enough, and merely a financial necessity, but it requires explanation, more especially as the shareholders were informed last July that everything was paid for, that there was no liability of any kind, and that all the works were in first rate order. The dividend is, of course, a great falling off compared with 40 per cent., but we warned our readers long since not to calculate upon a continuance of such fancy divisions. They were simply due to an exceptionally fortunate state of trade, and with the cessation of such fortuitous influences reduced dividends were a matter of certainty. The announcement of indebtness taking the majority of holders completely by surprise has reduced the market value of the shares, which are now quoted 13 to 14, with a weak market.

The principal feature of the foreign mine share market has again been the demand

for Javali at a further advance. A very large number of shares have changed hands, and a steady investment business has been done. Gold Runs have been steady; this property—hydraulic—is said to be looking very promising for the future.
JAMES H. CROFTS.

The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, FEB. 12, 1875.

COPPER.	£	s.	d.	£	s.	d.
Best selected...p. ton	92	0	0-	—		
Tough cake and tile.	90	0	0-	—		
Sheathing & sheets...	96	0	0-	—		
Bolts	99	0	0-100	0	0	
Bottoms	99	0	0-100	0	0	
Old	85	0	0- 87	0	0	
Australian, Wallaroo	93	0	0-	—		
ditto other brands	91	0	0- 92	0	0	
Chili bars, g.o.b.	83	10	0- 85	0	0	
Wire .....per lb.	0	1	0-	—		
Tubes	0	1	0½-	—		
BRASS.			per lb.			
Sheets			9¼d.-10¼d.			
Wire			9¼d.-	—		
Tubes			12d.-12½d.			
Yellow metal sheathing			8¼d.-8¾d			
Sheets			8¼d.-			
SPELTER.			per ton.			
Foreign on the spot..	23	10	0-24	0	0	
,, to arrive ...	23	15	0-23	17	6	
ZINC.						
In sheets	32	10	0-33	0	0	
TIN.						
English blocks ... £	96	0	0- 97	0	0	
Do., bars (in brls.)	97	0	0- 98	0	0	
Do., refined	100	0	0-	—		
Banca	98	0	0-100	0	0	
Straits	91	0	0-	—		
Australian	90	0	0-	—		
TIN-PLATES.*			per box.			
Charcoal, 1st qua.† £	1	18	0-	—		
IX Do., 1st quality ...	2	4	0-	—		
IC Do., 2d quality ...	1	16	0- 1	17	0	
IX Do., 2d quality ...	2	2	0- 2	3	0	
IC Coke	1	7	6- 1	8	6	
IX Ditto	1	13	6- 1	14	6	
Canada plates, p. ton..	18	10	0-19	0	0	
Ditto, at works.....	18	0	0-18	10	0	

* At the works, 1s. to 1s. 6d. per ton less.
Terne-plates 2s. per box below tin-plates of similar brand.

IRON.	per ton.	£	s.	d.	£	s.	d.
Bars Welsh, in London		8	17	6-	—		
Do., to arrive		8	15	0- 9	0	0	
Nail rods		9	10	0-	—		
,, Staffd. in London..		10	10	0-	—		
Bars ,, ditto		10	10	0-11	0	0	
Hoops ,, ditto		11	10	0-12	0	0	
Bars ,, at works ...		9	10	0-11	0	0	
Hoops ,, ditto		10	10	0-11	10	0	
Sheets, single, & plates		12	10	0-12	15	0	
Pig No. 1, in Wales ...		5	0	0- 6	10	0	
Refined metal, ditto ...		7	0	0- 8	0	0	
Bars, common, ditto...		7	15	0- 8	0	0	
Do., merchant, f.o.b. in Tyne or Tees...		8	0	0- 8	10	0	
Do., railway, in Wales..		6	15	0- 7	0	0	
Do., Swed. in London.		16	0	0-17	0	0	
To arrive		16	10	0-	—		
Pig, No. 1, in Clyde ...		4	7	0- 5	12	6	
Do., f.o.b. Tyne or Tees		4	0	0- 4	5	0	
Do., Nos. 3, 4, f.o.b., do.		3	10	0- 4	0	0	
Railway chairs		5	0	0- 5	5	0	
,, spikes		12	10	0-14	0	0	
Indian Charcoal Pigs, in London, p. ton ...		8	0	0-10	0	0	
STEEL.				per ton.			
Swed., in kegs (rolled)		—		-	—		
Ditto (hammered)		19	0	0-20	0	0	
Ditto, in faggots		20	10	0-	—		
English, spring		19	0	0-24	0	0	
LEAD.				per ton.			
English Pig, com.		22	15	0-23	0	0	
Ditto, L.B.		23	0	0-23	5	0	
Ditto, W.B.		24	0	0-	—		
Ditto, sheet		24	10	0-	—		
Ditto, red lead		25	0	0-	—		
Ditto, white		30	0	0-32	0	0	
Ditto, patent shot		26	10	0-27	0	0	
Spanish		22	5	0-22	10	0	
QUICKSILVER (p. bot.)		21	10	0-	—		

† Add 6s. for each X.

REMARKS.—Plethora of money must invariably be productive of important changes in the value of produce and stocks. The latter are generally the first to experience the effect of an easy money market; and when quotations on the home and foreign Stock Exchanges begin to show a general tendency to advance, holders of produce may be pretty certain that so soon as stocks have gone up to certain limits the investing public will turn their attention in other directions, and produce of one description or another will follow suit. This seems to be the present state of things. Money is cheap, and likely to remain so. Stocks are looking up in consequences. Quotations for metals are generally fairly firm. A speculative feeling may at any moment spring up. Up to the present time the total absence of this element has, without doubt, tended to restrict even legitimate business within narrower limits than would otherwise have been the case. When buyers for consumption or shipment find that there is no speculative movement in a market their confidence in it is not so great as when they find it necessary to act lest the opportunity should be lost, and a rapid rise in price prevent them placing their orders at all, or upon such favourable terms as they otherwise might. There is much in favour of it. No political complications appear likely to hinder the progress of commercial enterprise. There are no rumours of wars, famines, or other calamities at present impending, which impoverish nationalities and divert wealth from the channels in which it ordinarily flows. The effect of past disturbances of this kind in various parts of the civilised world has either disappeared altogether or is fast disappearing—so that, judging from the appearances which now present themselves, it would seem that the anticipations of resuscitated trade with which the year opened may be realised. Doubtless the condition of South Wales at the present time tends to retard the development of trade in that district, and things are pretty well at a standstill there; but meanwhile wear and tear is going on, and permanent way will have to be maintained; and, as with railways, so with the various other uses to which metals are applied—so that any present lack of animation may be succeeded by a period of activity for the supply of manufactured metal for the maintenance or extension of existing works, as well as for new undertakings, which as trade revives are certain to be taken in hand. The longer the period of comparative inactivity continues the greater will be the rebound which may eventually occur.

COPPER.—The market has become distinctly firmer during the week, and holders have been unwilling to sell except in small quantities, and at full rates. Many, indeed, decline to sell at all, as they look for a considerable advance. The chief support which the market has received has been the continuance of the Indian demand for manufactured. So long as this goes steadily on, even should there be no increase to it, prices of all descriptions of copper will probably remain very firm, and with a general demand will certainly advance. Sir Charles Forbes and Co.'s circular, dated Bombay, Jan. 18 last, states that "both sheets and sheathing have been in improved request at an advance of 8 annas per cwt, stocks being light, and the up country demand having strengthened. No transactions, however, have transpired from first hands. Yellow metal continues in good enquiry, and prices have advanced 8 annas per cwt. all round, and although only one sale has been reported from first hands, a good bazaar business has taken place."

Messrs. Gilander, Arbuthnot, and Co., of Calcutta, in their circular dated Jan. 15 last, report that all descriptions of copper have been in active demand throughout the month, and supplies having been light, large sales have been made for forward delivery. A consignment of 245 tons of Australian tile having lately arrived, dealers appear less inclined to buy towards the close, but prices have not suffered any decline as yet. Our quotations for sheathing and braziers show an advance during the month of Rs. 1-4 and 1-12 per factory maund respectively; but the latter description has been sold to arrive at Rs. 40-4 per maund. In English tile and ingots no transactions have been reported, stocks being exhausted. Australian tile has been in active request, dealers having sold at Rs. 40-4; the last sale to arrive is reported at Rs. 38-8 per maund. Japan copper has also shared in the general improvement. The value of slabs and tiles on the spot, being Rs. 35 to 36 and 37 to 38 per annum respectively. Yellow metal has been readily saleable at an advance of 4 to 8 annas per maund, stocks in first hands being almost exhausted. Thus, judging from these reports, the position of the Indian market is favourable to a continuance of the demand, and a very little increase thereto would speedily be felt in the effect produced upon prices. The report on Monday of the business done in Chili bars was to the effect that the market was active and firm, 82l. 10s. to 83l. 10s. being the limits within which business was done in g.o.b., usual cash terms. On Tuesday, upwards of 1000 tons of ore, of an average produce of 24¾ per cent., realised an average price of 15s. 5¾d., and Cape ores 16s. 7¾d., per unit. Chili bars changed hands this day from 83l. 10s. to 84l. On Wednesday the market was very firm, and bars were quoted fractionally higher. On Thursday, regulus was sold at Swansea at 16s. 6d., and ore at 16s. Chili has changed hands, Lota, 83l. 10s.; Urmeneta, 83l. 15s.; and named brands, 84l., all on cash terms. To-day the market is firm, but without any important change.

IRON.—The condition of affairs in South Wales still continues in *statu quo;* the lock-out is in force throughout the whole of the district, but it is questionable whether, had this not been the case, the masters would have been able to secure a sufficiency of orders to keep the men going. Whether it is that the existing demand is taken up in other districts, where the men are at work, or not, enquiries for finished iron do not come forward in this district in such quantities as to leave the impression that now, were the men to return to their duty, there would be a sufficiency of work for them to do. Owing to the disorganisation which has for so long prevailed in this district, it has resulted in the alienation of a considerable amount of trade which formerly used as a matter of course to find its way to South Wales. The trade with America, as well as with other important markets, seems hardly to have any existence at all. In the North of England the iron trade continues in an unsettled state. Owing to impending difficulties with the blast-furnace men, prices have been firmly maintained, but when it transpired that the masters were resolved to "damp down" the furnaces rather than give way to the demands of the men, the opposition was withdrawn, and the quotations for iron have reverted to the old figures—No. 1, 63s.; No. 3, 58s.; No. 4 (forge), 55s. 3d. The men are now anxious that the masters should refer the questions in dispute between them to arbitration, but the masters have not forgotten that only a few months ago the men themselves refused, at the masters' request, to submit to arbitration. The returns for January made by the Cleveland ironmasters exhibit an addition of nearly 4000 tons to the stocks. Railway bars are quoted at about 7l., and plates for shipbuilding at 9l. Owing in some measure to the lock-out in Wales, there is an improvement in the enquiry for railway materials. There has been very little fluctuation in the value of Scotch warrants during the week; 72s. 6d. to 73s. 9d. is about the extreme quotation. The closing quotation is about 73s. 6d.

SHIPMENTS.

Week ending Feb. 6, 1875	Tons 7,548
Week ending Feb. 7, 1874	7,303
Increase	245
Total increase for 1875	Tons 10,263

SPELTER.—Ordinary Silesian is quoted about 23l. 10s., but the market lacks animation.

ZINC.—London rolled has been sold at 28l.

LEAD.—The market is a shade firmer. Good soft English pig is quoted 23l. to 23l. 5s., and soft Spanish 22l. to 22l. 10s.

QUICKSILVER.—The last transaction reported is 21l. 10s.

TIN.—The tin market has lacked animation throughout the week. Transactions have been limited, and prices have not been firmly maintained. At the same time, there has been no important drop in values, and it is questionable whether holders would submit to more than trifling concessions. At the beginning of the week Straits tin changed hands at 92l. cash, and to-day the quotation is 90l. to 90l. 10s. Australian realises 90l. cash.

TIN-PLATES.—The market is quiet. The large sales for America have not afforded that support to the market which was expected. The general demand is limited, and trifling concessions might probably be submitted to, to secure a good order.

Messrs. Henry Rogers, Sons, and Co.—There is a slightly-increased trade in metals, more especially in copper, tin, and lead; the former has increased in value about 30s. from its lowest point.—IRON: The lock-out in Wales continues. Makers in the North and Staffordshire look for a somewhat increased demand whilst the Welsh works remain closed, but higher prices are not likely to rule in consequence. Pig-iron is much the same value as last week, with a limited demand—usual at this season.—COPPER: Chili bars have improved 20s. to 30s., and the second-hand parcels of English being pretty well cleared off, the smelters ask and obtain better prices for limited quantities. The demand for manufactured has ceased for the moment, and yellow metal is not much wanted; but quotations for both are fractionally higher than a short time back.—TIN: We have had an unsettled market all the week, prices changing pretty well day by day without any large quantities being turned over; foreign is cheaper in proportion than English, and may in consequence improve a trifle in value.—SPELTER: This metal is for the moment entirely neglected, and prices would undoubtedly give way were any quantity forced upon the market; on the other hand, a very slight consumptive demand would soon increase prices, which on the Continent are fully 10 per cent. higher than this side.—LEAD is still somewhat neglected, but there are appearances of increased demand.

Messrs. James and Shakespeare.—COPPER: We note purchases of Chili ore, to arrive Swansea; at 16s. per unit, and of regulus at 16s. 9d., to arrive Liverpool. The Swansea Ticketing took place on 9th inst., when 1096 tons of ore, averaging 24¾ per cent. produce, fetched an average price of 16s. 5¾d. per unit; stuff from the Cape, of usual good quality and high percentage, realised 16s. 7¾d. The Chili charters for last half January were known here on 5th inst., and consisted of 1100 tons bars and ingots, 200 pure in ores and regulus for England, 400 bars for France. The quantity being moderate imparted a firmer tone to the market, and with but comparatively small sales of good ordinary brands, we note a rise in bars of about 20s. to 30s. per ton. For Australian there is rather more enquiry, and good sales are believed to have been made, though no particulars are reported. English sorts are decidedly firmer, and the parcels lately offering from second hands appear to have been absorbed by consumers.—TIN: The demand for English is still very slack, and purchases can be effected at lower rates. For Foreign there has been only a moderate enquiry, and in Straits we note a fall in price of about 1s. 6d. per hundredweight; but Australian, which appears to be gaining considerably in favour especially amongst consumers, has maintained its value, notwithstanding that the arrivals continue large, those of the present month amounting to 767 tons, whilst of Straits only 190 tons have as yet come to hand.

THE IRON TRADE—(Griffiths's Weekly Report).—Friday Evening, Feb. 12: We quote makers' No. 1 iron as follows:—Gartsherrie, 88s.; Coltness, 90s.; Calder, 90s.; Langloan, 90s.; Summerlee, 87s. 6d.; Monkland, 76s. f.o.b. Glasgow; Glengarnock, 86s. 6d.; Eglinton, 75s. f.o.b. Androssan; Shotts, 87s. 6d. f.o.b. Leith; Kenniel, 82s. 6d. f.o.b. Bo'ness. After some minor fluctuations during the week, the closing price of G.M.B. warrants to-day in Glasgow is 73s. 3d. sellers, 73s. buyers, which is precisely the same as the closing price to-day week. We have nothing specially new to notice in the Iron Trade this week. The diminished output of iron caused by the Welsh strike has had no appreciable effect on the markets in Staffordshire. Orders this week have not accumulated to any great extent on the books of the North Staffordshire houses. The leading houses in the South are tolerably well supplied with orders. The demand for plates, however, continues to flag. Most of the makers of sheet-iron have orders to keep the works running full time, and the galvanising trade continues active both in Birmingham and Wolverhampton. It is stated that the new galvanising works erected at Darlaston, called the Darlaston Galvanising Company, have commenced operations, and turned out 40 tons of galvanised iron the first week. It will be remembered that Mr. James Hillman is the manager of this new concern, which promises well for the proprietors. This firm took an order last week for 300 tons of galvanised iron in a line. Mr. Smith, of James Russell and Sons, is one of the directors. Our market is without change; some good orders for sheets and hoops have been sent into Staffordshire this week. The incipient strike in Middlesborough is left by common consent to be settled by arbitration through Mr. Rupert Kettle, the eminent County Court Judge in the Black Country. The Welsh strike drags on without any incident worthy of notice. The strike of the Wednesbury tube-makers continues. Unsuccessful attempts have been made to induce the men at Wolverhampton to support the gas-tube makers in their efforts to continue the short-time system, the bone of contention in the present strike at Wednesbury.

Messrs. Pixley and Abell—GOLD: Since our last circular, and in pursuance of previous orders, 261,000l., in bars and coin, have been taken from the Bank; such withdrawals have, however, now ceased for the present, and although purchases would be still made for the Continent, it is very likely that all existing demands may be supplied in the open market. The arrivals have been 94,180l. from Japan, 50,000l. from New York, and 11,610l. from the Cape. The Neva has taken 10,000l. to the Brazils.—SILVER: The market is quiet at our last quotation of 57½d. per ounce, the demand being chiefly for Spain. The arrivals have been 31,700l. from New York, and 56,700l., per Potosi, from the Pacific; these amounts have been sold at the above price. The Surat takes 25,000l. to Bombay.—MEXICAN DOLLARS: A small amount of this coin brought by the States Line steamer realised 56⅞d., showing no change in price. The P. and O. steamer takes 52,000l. to China and the Straits.—EXCHANGE on India for Banks drafts at 60 days' sight is 1s. 10d. to 1s. 10 1-16d. per rupee.

CHEMICALS, MINERALS, AND METALS—(Messrs. J. Berger Spence and Co., Feb. 10).—Soda: Cream caustic, 60 per cent., 13l. 5s. to 13l. 10s.; white, 14l. to 14l. 5s.; soda ash, 23-16d.; soda crystals, 5l. 7s. 6d.; bi-carbonate, 14l. 15s.; salt cake, 2l. 17s. 6d. to 3l.; Glauber salts, 2l. 17s. 6d. to 3l.—Bleaching Powder: At 9l.—Alum: 8l. for loose lump; ground, 9l.—Nitrate of Soda: At 12s. 3d.—Ammonia: Sulphate, white and grey, 17l. 10s. to 18l.; carbonate, 7½d.; muriate, 30l. to 32l. 10s.; sal ammoniac, firsts, 45s.; seconds, 44s.—Potash: Muriates, 80 per cent., at 6l. 10s. to 6l. 12s. 6d., f.o.b.; Prussiate, red, 2s. 6d.; yellow, 1s. 3d.; chlorate, 10½d. to 11d.; bi-chrome, 6½d.—Iron Salts: Green and rusty copperas, 60s. loose; in casks or barrels, 65s.—Copper Salts: Sulphate of copper, 27l.—Litharge: Best flake, 26l. 10s.—Sugar of Lead: Brown, 28l.; ditto, white, 44l. 10s.—Saltpetre: Foreign, 22s. to 22s. 6d.; refined, 28s. to 28s. 6d.—Acid: Tartaric, English, at 1s. 6¼d.; foreign, 1s. 6½d.; oxalic, 6½d.; sulphuric, 3l. 10s. to 3l. 15s.; carbolic, No. 1, 11d.; picric acid, 1s. 11d. per lb.—Arsenic: 14l. to 14l. 10s.—Magnesia: Epsom salts, 3l. 17s. 6d.; refined, 4l. 10s.—Benzole: 30 per cent., —; 50 per cent., 4s. 6d to 5s.; 90 per cent., 6s.—Brimstone: Best thirds, 7l. 10s.—Phosphate of Alumina, 3l. to 3l. 10s. per ton.—Pyrites: Spanish cupreous, 7½d.; non-cupreous, 9d. to 9½d.—China-clay: 18s. f.o.b. Cornwall; best quality, 28s.—Phosphates: High strength, 80 to 85 per cent., 1s. 4d. to 1s. 5d. per unit; Estremadura, 1s. 3d.; ordinary, 60 per cent., 1s.; precipitated phosphate of lime, 70 per cent., 5l. 5s.; super-phosphates, 80 per cent., soluble, 3s. 6d. per unit; 25 to 26 per cent., 3l. 10s.—Manganese: Ores, 110s. to 115s. for 70 per cent.—Iron Ore: Hematite, 15s. to 22s. 6d.; puddling, 24s. to 27s.; oolitic, 8s. to 10s.—Iron: "Ayresome" Yorkshire pig-iron, delivery, January to March; No. 3, 60s.; No. 4 (foundry), 57s. 6d., net cash, or 1s. extra four months' bills: Scotch pig warrants, 72s. to 73s.; Staffordshire bars, 9l. 12s. 6d.; Hoop iron, —.—Copper: Chili bars, 83l. 10s. to 84l.—Tin: English ingot, 97l. 10s.; Straits, 91l. 10s.; Australian, 90l.—Tin-Plates: M.I.C., 25s. 3d. per box.—Lead: Best English soft pig, 23l. 10s. to 24l.; "Panther" delivered Manchester.—Antimony: French Star, 53l. to 55l.—Spelter: Silesian, 23s. 15s.—Sheet Zinc: N. 6, 31l. 15s.; N. 7, 30l. 15s.; N. 8, 29l. 5s.; N. 9, 28l. 15s., c.i.f. Hull or Liverpool.

The MINING SHARE MARKET has been particularly flat this week for Tin Mines, and without much activity in general business. The tin trade seems very unsettled, and the smelters have again reduced the price in Cornwall 2s. per hundredweight, which has naturally had a very depressing influence upon the miners, who were looking for an advance. It is said that the stocks of Australian and Straits tin in hand are very large just now; but, on the other hand, the production of Cornwall is seriously falling off, and the exports from the United Kingdom are increasing. These were during the month of January 720 tons, as against 617 in January, 1874, and 346 tons in January, 1873.

The settlement of the fortnightly account on the share market took place on Thursday and Friday, and was rather heavier than usual in several of the lead mines, and a few transactions have taken place during the week in Tankerville, West Tankerville, Roman Gravels, South Roman Gravels, Pennerley, Bog, Penstruthal, South Condurrow, West Frances, East Lovell, Wheal Grenville, Cook's Kitchen, Marke Valley, Parys Mountain, and a few others.

Carn Brea shares have declined to 50, 52. Dolcoath, 49 to 50; Cook's Kitchen, 9 to 9½; Tincroft, 27 to 28; Bog, 10s. to 15s. Van, 22 to 24; the sale of ore this week (800 tons) realised 15l. 9s. 4d. per ton, or 12,373l. 5s. East Lovell, 6½ to 7; the lode in the shaft sinking below the 100 is 8 ft. wide, tin throughout, and looking well for improvement. Great Laxey, 11 to 11½; Marke Valley, 23s. to 25s.; Old Treburgett, 8s. to 10s.

Roman Gravels, 12½ to 13; the ends north and south of old engine-shaft are each worth 4 to 6 tons of lead ore per fathom. South Roman Gravels, ½ to 1. Ladywell, 2½ to 3; the lode in the adit end south is 5 to 6 ft. wide, and looks like approaching something good. The stope in the 16, north of engine-shaft, are worth 15l. per fathom. Pennerley, 1½ to 1⅝; we understand the mine is looking well, and made a profit of 400l. on the last two months' working.

West Tolgus, 65 to 67; this mine is not yet in fork, but the lode in the 125 end is worth 4 to 5 tons of copper ore per fathom; the 105 end 4 tons. West Frances have been better, and leave off 10 to 10½; a good lode, we understand, has been cut into at the 144 or deepest level; and it is supposed to be the great flat lode of the district, that which is so rich in West Basset, South Condurrow, and Wheal Grenville, and, if so, it must pass through East Grenville.

Wheal Grenville, 5 to 5¼. Wheal Crebor, ⅞ to 1; the lode in the 120 stope east is worth 25l. per fathom. West Tankerville have been largely dealt in at 18s. to 21s., and leave off 20s. to 22s. 6d.; it is expected that 3 to 4 fms. will have to be driven south to meet the junction of the branches containing lead which have been passed through in the shaft above the 63. The mine sampled this week 20 tons of lead ores. Parys Mountain, 8s. to 10s.; Penstruthal, 12s. to 14s. Prince of Wales, 8s. to 10s.; a favourable change has taken place in the lode and in the country at the 77. Providence Mines, 4½ to 5; Glaisdale Whinstone, 20s. to 22s. 6d.; Rookhope Valley, 10s. to 12s. 6d.; Rosewall Hill and Ransom, 7s. 6d. to 9s. 6d.; South Condurrow, 5 to 5½; Van Consols, 1⅝ to 1¾; West Basset, 7 to 7½; West Chiverton, 2¼ to 2½; West Maria, 5s. to 7s. 6d.

Tankerville shares have been more freely offered, and leave off flatter at 9½ to 9¾. Some disappointment seems to be felt at the accounts and the general report just issued to the shareholders. The bottom level—the 152—has been driven 13 fms. on a lode averaging 5 ft. wide, and worth 60l. per fathom, but the present end, the report says, is "of a very masterly character, well charged with ore." The 140 end has gone through a rich lode for 23½ fms., but the present end is split up. The ends in the mine generally are poor, and, after enumerating the different stopes and winzes, the agent says that he hopes to be able to increase the returns from 100 tons to 130 tons per month, in which case, if the price of lead keeps up, the profits would be from 600l. to 700l. per month. The balance-sheet is not issued, but it is stated that at the board meeting of directors, to be held on Feb. 2, the credit balance, after charging every liability to that date, was about 3500l.; and looking at the improvements which have taken place in the mine during the last six months, and the very encouraging reports held out by Capt. Waters, the directors expect to declare another dividend shortly.

Wheal Kitty (St. Agnes), 5 to 5½; South Frances, 8 to 10; Treleigh Wood, 5 to 7; East Basset, 3 to 4; East Caradon, ⅛ to 1⅛; Devon Great Consols, 2 to 2½; East Van, ¾ to 1; Hingston Down, 1 to 1½. New Rosewarne, ¼ to ⅜; a good discovery of copper has been made in the 58 west, where the lode is worth 15l. per fathom in the elvan, which is generally so productive of ore. The 67 end, some distance behind the 58, is also producing copper, and improving. At the 22 trial cross-cut a branch has been intersected, producing good copper ore. Wheal Peevor shares have improved to 5⅛, 5⅜. Wheal Uny, 3 to 3¼.

Almada and Tirito, ⅝ to ¾; Cape Copper, 31 to 32; Cedar Creek, 1½ to 1⅝; Chontales, 10s. to 12s. 6d.; Eberhardt and Aurora, 4¼ to 5; Emma, 1¾ to 2; Flagstaff, 2⅛ to 2¼; Javali, 8s. to 10s.; Richmond, 7¼ to 7½; South Aurora, 12s. to 14s.; Sierra Buttes, 1¾ to 2¼; Sweetland Creek, 2¼ to 2½; Tecoma, 1⅛ to 1⅜.

The Market for Mine Shares on the Stock Exchange during the week has been fairly active; business, however, has been somewhat checked by the settlement of the fortnightly account, which was completed yesterday (Friday).

Home mines have again been chiefly represented by lead descriptions, a fair amount of business having taken place in Van, Roman Gravels, Tankerville, Assheton, Pennerley, &c.

American mines remain without much quotable change; the tendency in this department is towards restriction, operators being disinclined to purchase in face of the partial, if not the entire, suspension of operations at the various mines during the winter months. Hydraulic mine shares have been in active demand, and more than an average amount of business has been transacted. Cedar Creek shares have advanced. Blue Tent shares are steady, at par. Birdseye Creek, unchanged. Sweetland Creek have somewhat fluctuated, but close at about last week's price.

Richmond Consolidated, 7¼ to 7½; Cablegram received: "Week's run, $45,000." The present mild winter has allowed of ore and fuel being brought in with but little interruption, and the stocks in hand are sufficient to allow of the smelting being continued for some time ahead, even if the weather should change for the worse. It was expected that the refining works would be in operation about the middle of this month. A large proportion of the bullion made will, therefore, in future be refined at Eureka, which bids fair to become the Swansea of the district. The drift started at the 130 feet level of the winze is advanced 50 feet in rich carbonates. The *Eureka Sentinel* (Jan. 21) states:—

"That there can be little doubt that the town, on the completion of the railway, will become the centre of the mining interests of the whole encircling region." . . . "At Richmond a body of rich carbonate ore was found some weeks ago in the M'Gee shaft, considerably below the 400 feet level."

Two hundred tons of bullion were forwarded last week, making a total sent on since Dec. 1 of 1330 tons." The total make of bullion this season is $1,697,000; since Sept 1 the make is $994,000. Eberhardt and Aurora, 4⅛ to 4¼; South Aurora, ½ to ⅝.

Emma, 1⅝ to 1¾; the directors bring under the notice of the shareholders the fact that the course they are pursuing in the affairs of the company must necessarily bring about a full disclosure of all matters connected with its formation in England, without destroying the well-founded prospects of recovering a very large sum of money from the vendors in America. Towards this end it is desirable and necessary that shareholders should give their support, so as to strengthen the hands of the directors in the task they have before them; and as a step in this direction shareholders are invited to discountenance the proceedings taken for the winding-up of the company, inasmuch as the board and their legal advisers are of opinion that should the endeavour be successful the expenses will be increased, and the prospect of obtaining restitution from the vendors materially jeopardised. Flagstaff shares show a slight advance, and close 2⅜ to 2½. Last Chance, 1⅜ to 1⅝; Tecoma, 1¼ to 1⅜.

Blue Tent, 5⅛ to 5⅜; operations are progressing very well. Water is abundant, and washing going on without interruption. Cedar Creek, 1⅝ to 1¾; Col. Ludlum advises that he does not look for much return from the January washing, owing to the intermittent water supply, and the hindrance caused by the immense boulders he has met with. He, however, anticipates good results from the current month's work. He has secured the remainder of the claims on the line of the Yankee Tunnel, and has resumed driving the same. Birdseye Creek, 2⅛ to 2⅛; Mr. Powers writes that it is steadily raining, and that he is running the Neece and West, Stahr, and Walonpa claims. Sweetland Creek, 2⅛ to 2⅛; the last advices from McLean report the situation as unchanged. We would soon be able to complete the current run as water was more abundant, but the future supply was still in abeyance. Gold Run, 16s. to 17s. 6d.

St. John del Rey, 265 to 270; a slight advance on last week's quotations followed the receipt of last week's telegram, announcing an increased daily yield, an increased profit for the month being a necessary consequence. Don Pedro, ⅛ to ¼ dis.; estimated produce for January 6300 oits., and produce cleaned to date, 4600 oits.; for the corresponding month of last year the produce was 7967 oits., which resulted in a profit of 416l. Sierra Buttes, 2 to 2¼; ditto Plumas Eureka, 1⅜ to 1⅝. The Sierra Buttes clean-up is estimated at only $30,000, the supply of water having been lessened in consequence of heavy storms in the mountains having prevented the flow of the water through the flume. At the Plumas Mine the clean-up is estimated at $31,000. Independence have been in demand in consequence of the advices from the mine reporting the pay streak in the middle shoot being 18 in. wide, and very rich in gold. Assays of the quartz yield as high a value as $150 per ton. The clean-up for 18 days of January, the mill having been stopped for the want of water from same cause as at Sierra Buttes, amounted to $2750, and as the rich ore from the middle shoot could not have been available, the smallness of the produce cannot be considered unsatisfactory. The mill went to work again on the 25th, so that the current month's crushing may be expected to test the value of the new discovery. Shares have had a rise, and close 3 to 3¼. London and Californian, ⅛ to ¼; the clean-up for February is $20,800, and the expenses $7500. The agent reports a remittance of 2000l. to London, and that the prospects at second level are very encouraging. Port Phillip, ⅛ to ¼; for the month ending January the yield per ton was 4 dwts. 7 grs. per ton, against 4 dwts. 17½ grs. for the corresponding period last year.

Cape Copper, 31 to 31½; the latest advices appear in another column. During December Ookiep returned 860 tons of 30 per cent. ore, and Spectakel 33 tons of 31 per cent.: 555 tons of ore have been sold by public ticketing, at an average of 16s. 5½d. per unit, realising approximately 12,200l.; and 700 tons at an average of 16l. 8s. per unit, realising approximately 18,600l.; and 900 tons have been put forward for sale on Feb. 23. New Quebrada, 3 to 3¼; Rio Tinto, 9½ to 10; Russia Copper, 2¾ to 3¼.

Van, 22 to 23; the usual monthly report appears in another column. The lode in the 90, as far as cut into, is richly charged with lead and blende, but progress is slow until the water is drained from the lode. In other parts of the mine show little alteration. The sale of 800 tons of lead on Thursday realised the sum of 12,373*l.* 5*s.* Van Consols, 1⅛ to 2⅛; the lode in the bottom of the mine, 25 fathoms under adit, is producing now 3½ tons of lead per fathom, with every sign of much greater productiveness. There is, no doubt, a great deposit of lead underneath, and the workings are being rapidly deepened to reach the productive part of the lode. The deeper the workings at Van Mine the richer the lode, and the like results will certainly take place at Van Consols: 25 tons of lead were sold on Monday last. At Great West Van the lode in the 46 is improving, and the course of ore gone down in the bottom of the 34 is expected to be met with daily. The cross-cut to intersect the main lode in the 34, from Eliza's shaft, is rapidly approaching the lode, and a good course is expected to be reached within a month; the rock already is much impregnated with leaders or branches of lead, doubtless coming from the large lode ahead: 20 tons of lead were sold on Monday last, at 13*l.* 17*s.* 6*d.* per ton. Grogwinion, 3¼ to 3⅜; the usual monthly parcel of 50 tons of lead, the produce of four weeks' working, will be sold on Feb. 17; the mine continues to look well at all points. Wye Valley, 3¼ to 3⅜: the self-acting dressing machinery has been completed, and is in active working; the half-yearly dividend is payable at the end of the present month. Pennerley, 1¼ to 1⅜; the report appears in another column, and, on the whole, may be considered as encouraging. The mine is in several places showing indications of an improvement. We note some enquiry for the shares during the week at advanced prices. Bog, ⅛ to ¼; the mine is looking much the same. The cavity in the Whitestone lode, in the 175 fm. level, is opening out again. Other parts of the mine are without alteration, and all things proceeding in a satisfactory way.

Penstruthal, 12*s.* to 14*s.*; this mine continues to open out satisfactorily. Capt. Teague, writing this week, states his belief that he is opening a good mine. The aggregate value of the points in operation is about 130*l.* sterling per fathom. Cathedral, 20*s.* to 25*s.*; the works are being pushed on the driving of two levels. East and west at the 30, under adit, is progressing, and the sinking of the shaft will be resumed as soon as the levels are advanced sufficient to enable the shaftmen to resume. The manager expects to sell at the next sampling between 400*l.* and 500*l.* worth of copper ore.

Subjoined are the closing quotations:—

Bog, 10*s.* to 12*s.* 6*d.*; Carn Brea, 50 to 52; Devon Great Consols, 1⅞ to 2⅛; East Lovell, 6½ to 7¼; Great Laxey, 10½ to 11; Hingston Down, ⅞ to 1⅛; Pennerley, 1⅛ to 1⅜; Parys Mountain, 7*s.* to 9*s.*; Penstruthal, 11*s.* to 12*s.* 6*d.*; Roman Gravels, 12½ to 13; Tincroft, 26½ to 27½; Tankerville, 9¼ to 9¾; Van, 22 to 23; Van Consols, 1¾ to 2; West Basset, 7 to 7⅛; West Chiverton, 1⅞ to 2⅛; Wheal Grenville, 4½ to 5; Almada and Tirito, ⅜ to ⅝; Birdseye Creek, 2⅝ to 2⅞; Cedar Creek, 1⅝ to 1⅞; Cape Copper, 31 to 31½; Chontales, ¾ to ⅞; Colorado Terrible, 3½ to 3¾ ex div.; Don Pedro, ⅝ to ¾ dis.; Emma, 1⅝ to 1⅞; Eberhardt and Aurora, 4⅝ to 4⅞; Flagstaff, 2¾ to 3; Gold Run, 14*s.* to 16*s.*; Independence, 3⅜ to 3½; Last Chance, 1⅛ to 1⅜; Malpaso, ⅝ to ¾; Malabar, ⅝ to ¾; New Quebrada, 3 to 3½; Rica, ⅛ to ⅜; Richmond Consolidated, 7¼ to 7½; St. John del Rey, 265 to 270; Sweetland Creek, 2¼ to 2½; Sierra Buttes, 1¼ to 1⅜; South Aurora, ½ to ⅝; Tecoma, 1¼ to 1⅜; United Mexican, 3 to 3⅛; West Esgair Lle, 2⅛ to 2¼; Blue Tent, 5⅛ to 5⅜; Holcombe Valley, ⅞ to 1; West Tankerville, ⅞ to 1⅛.

COLLIERIES AND IRONWORKS COMPANIES.—The most noticeable feature of the week has been the fall in Thorp's Gawber, consequent on the issue of the subjoined circular:—"I am requested to inform you that a dividend at the rate of 15*s.* per share, out of the net profits for the six months ending Dec. 31, amounting to 8517*l.* 18*s.* 3*d.*, was declared payable on the 13th instant. The usual dividend warrant and statement of accounts will be forwarded in due course. The balance carried forward on July 1 was 807*l.* 6*s.* 2*d.*, the profit for the quarter ending Sept. 30 being 2767*l.* 17*s.* 10*d.*, and for the quarter ending Dec. 31, 4942*l.* 14*s.* 3*d.* After payment of the dividend, amounting to 7500*l.*, there will be carried forward to the next account a balance of 1017*l.* 18*s.* 3*d.* In accordance with the wish expressed by several of the proprietors, the directors beg to called a general meeting of the shareholders at the company's offices, on Monday, for the purpose of explaining the accounts, and also for considering the expediency or otherwise of raising capital, either by loan or debentures, to replace the existing debt." It seems to be a little unaccountable that in the face of declining dividends from 40 to 15 per cent., and dull trade generally, that the directors should have chosen such a moment "for considering the expediency of raising capital." The company has power to issue another 100,000*l.* share capital, and it must be felt as a great pity that the board did not avail themselves of the opportunities frequently presented of placing some of this at 50 per cent. prem. The shares, from 14½ to 15, have declined to 13, 13½, closing by no means firm. Great Western Colliery, 10 to 12; West Cumberland Iron, 9½ to 10½; Skerne Iron, 7 to 7½; Industrial Coal, 3 to 3¾; John Bagnall, 5¼ to 6; Midland Iron, 12 to 12½; Charlton Iron, 37 to 25 dis.; Silkstone Fall, 1¼ to 1⅜; Silkstone and Dodworth, 28 to 30; Ebbw Vale, 19½ to 20⅝; Original Hartlepool, 8 to 9; Earle's Shipbuilding, 16½ to 17½.

The directors of the Russian (Vyksounsky) Ironworks Company (Limited) have declared an interim dividend of 5 per cent., free of income tax. The directors of the Birmingham Wagon Company (Limited) have declared a dividend at the rate of 10 per cent. per annum for the past half-year, and a bonus of 5 per cent. for the year. A special meeting of the Upper Elbe Colliery Company (Limited) is called for the 25th inst. The creditors of the Knighlor, Ireverbyn, and Resugga Hematite Iron Ore Company are required to send in their names to the liquidators. Newport Abercarn, 3½ to 4½; United Bituminous, 5*s.* to 7*s.* 6*d.*; Chapel House, 4½ to 4⅝; Alltami, 5 to 5½; Bilson and Crump Meadow, 10*l.* fully paid, ⅛ to 1 prem. The strike is now over, and the collieries are once more in full work. The annual meeting will be held in the course of a week or two, and a further dividend declared. Cardiff and Swansea, 6*l.* paid, 4½ to 5. Richards and Company, 4*l.* paid, ¼ to ½ prem.; these shares are very firmly held.

At Swansea Ticketing, on Tuesday, 1096 tons of copper ore were sold, realising 22,350*l.* 12*s.* 6*d.* The particulars of the sale were—Average standard for 9 per cent. produce, 103*l.* 3*s.*; average produce, 24¾; average price per ton, 20*l.* 7*s.* 10*d.*; quantity of fine copper, 271¼ tons. The following are the particulars of the two last sales:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Jan. 26	1273	£101 17 6	16 11-16.	£13 16 10	16*s.*0*d.*	£80 0 0
Feb. 9	1096	103 3 0	24¼	20 7 10	16 5	82 1 6

Compared with the last sale, the advance has been in the standard 1*l.* 5*s.* 6*d.*, and in the price per ton of ore about 6*s.* 2*d.* On Feb. 23 there will be offered for sale 923 tons of Cape Copper Company's ore, 7 tons of Australian, and 5 tons of precipitate.

Messrs. Cummins and Chinnery are inviting subscriptions for 300,000*l.* ($1,500,000) FIRST MORTGAGE SEVEN PER CENT. STERLING BONDS, redeemable at par in 1902, of the UTICA, ITHACA, AND ELMIRA RAILROAD COMPANY, at the price of 175*l.* per 200*l.* ($1000) bond (inclusive of accrued interest from Jan. 1 last) at which price the bonds will return 8*l.* 10*s.* per cent. per annum to investors. The cash expenditure upon the road has already been $1,800,000, of which sum $1,040,000 have been derived from subscriptions at par to the shares of the company, and the remainder from cash advances made by the proprietors of the neighbouring collieries and others interested in the speedy completion of the line. The proceeds of the bonds now offered for subscription will be applied in the first place to the completion and equipment of the road, and afterwards to the entire liquidation of the company's floating debt. The work remaining to be done, as certified by the engineer of the company, comprises the construction of only seven miles of railway, and the laying of iron upon seven additional miles, the rails and fastenings for which have been delivered, and the grading done. The entire line will be completed and equipped in June next, in time for the summer coal movement, which begins in July. Three of the intersecting railroads are among the principal coal-carrying lines of Pennsylvania. The receipts from coal traffic transportation over the 65 miles of road on which the company will be entitled to tonnage, estimating only 280,000 tons per annum (though probably four times that quantity will be carried), and calculating the working expenses at the high rate of 60 per cent. of the gross earnings, the coal traffic alone, exclusive of all local and general traffic, will provide the interest upon the entire bonded debt of the company. On the road and its equipments, free from obligations and encumbrances of every sort, and thoroughly organised to meet the demand for traffic accommodation, the holders of bonds now offered for subscription will possess a permanent first charge. The subscription lists will open on Monday and close on Thursday. The bonds are quoted ½ to 1 prem. The prospectus will be found in another column.

RUSSIAN (VYKSOUNSKY) IRONWORKS.—The directors of this company have declared an interim dividend of 5 per cent., free of income tax, payable on March 1.

*** With this week's Journal a SUPPLEMENTAL SHEET is given, which contains:—Original Correspondence: Iron Industries of Lancashire (R. Meade); Mining in Queensland; Fuller's Reef Gold Mining Company, New South Wales (V. Nissen); Cape Copper Mining Company; Mineral Resources of Canada; Richmond Consolidated Mining Company; Chemical Metallurgy—the Nascent Process; Rock Drills; Cautions to Patentees; Clee Hill Colliery (W. Bertram); Park of Mines; Hints for Investors in Tin Mines; Welsh Gold Mines; "Ex Nihilo Nihil Fit"; Wotherton Mine, Traction Engine, and Railways; Successful and Unsuccessful Mining, No. II. (E. Skewis); Foreign Mining and British Capital (B. Anthony); Crenver and Wheal Abraham United Mines; Wheal Mary (T. Parkyn); Javali Mine; Property Trust—Foreign Mining and Metallurgy—Collieries and Ironworks in China—Valleys, and their Relation to Fissures, Fractures, and Faults—Novel Principle of Rock Drilling (*illustrated*)—Patent Matters, &c.—Meetings of the Mold-Argoed Colliery, Mwyndy Iron Ore, Newport Abercarn Black Vein Steam Coal, Kingston Valley, Denbighshire Consolidated, and Alltami Colliery Companies.

ORES, &c.

I BUY at the highest prices:—
LEAD ORES.—LEAD-SILVER ORES.—SILVER-LEAD ORES.
SILVER-LEAD.—HARD LEAD.—ANTIMONIAL LEAD.
GOLD AND SILVER ORES.
ZINC AND LEAD ORES MIXED TOGETHER.
Particulars by letter.
ARMAND FALLIZE, Ingénieur, à Liége (Belgium)

SALT LAKE CITY, UTAH TERRITORY, U.S. AMERICA.

WILLIAM BREDEMEYER,

MINING AND CONSULTING ENGINEER
U.S. MINERAL SURVEYOR.
Particular attention paid to Underground Surveys.
OFFICE,—KIMBALL BLOCK, SALT LAKE CITY.

RICHARD P. ROTHWELL, C.E., M.E.,

MINING AND CIVIL ENGINEER,
27, PARK PLACE, NEW YORK.
Vice-President of the American Institute of Mining Engineers; Member of the American Society of Civil Engineers; of the North of England Institute of Mining Engineers; of the Geological Society of France, &c., &c.; Editor of the Engineering and Mining Journal, New York.
Reports on Mineral Properties, and on the Working and Management of Mines.
ADVISES AS TO THE VALUE OF AMERICAN MINING STOCKS AND INVESTMENTS.
A thorough technical education and long practical experience in Mining in various parts of Europe and America, enable Mr. ROTHWELL to give SAFE ADVICE; and his position as Editor of the leading Mining Paper of America affords him unusual facilities for knowing the ACTUAL VALUE of American Mining Securities and the standing of companies.
References: The Presiding Officers of the American Institute of Mining Engineers, and the American Society of Civil Engineers.

CAPPER PASS AND SON, BRISTOL

ARE PURCHASERS OF
ANTIMONIAL or HARD LEAD, LEAD MATTE, LEAD SLAGS, LEAD ASHES, SULPHATE OF LEAD, COPPER SLAGS, COPPER REGULUS or MATTE, TIN ASHES, and TIN SCRUFF.
MIXED METALS and DROSS, containing LEAD, COPPER, TIN, or ANTIMONY.

A. H. KENRICK,

ENGINEER,
MINING MACHINERY AND METALS,
13, RUMFORD STREET, LIVERPOOL.
Commission Agent for the Sale and Purchase of Mining and other Plant.
FOR SALE, a 22-in. PLATE and SHEET TRAIN, complete; a 65-in. PUMPING ENGINE; a 30-ft. WATER WHEEL; and a quantity of 8-in. PUMPS, &c.
WANTED, a quantity of 16 or 18 lbs. BRIDGE RAILS.

LONGDEN'S LIST.

FOR SALE:—
POTTER'S LEAD SETT (developed, and price low).
TIN and COPPER SETT (good, and price low).
WANTED:—
ANTIMONY (400 tons a month).
SULPHUR ORE or PYRITES.
COLLIERY yielding CANNEL.
HENRY LONGDEN, MINING EXPERT,
18, COLEMAN STREET, LONDON, E.C.

THE ROCK-BORING CONTRACT COMPANY.

DARLINGTON'S PATENT ROCK-BORING MACHINERY.
OFFICES,—2, COLEMAN STREET BUILDINGS, MOORGATE STREET, LONDON.
FOR TUNNELLING, DRIVING LEVELS, CROSS-CUTS, AND SINKING SHAFTS.

WANTED,—A FRENCH GENTLEMAN, 24 years of age, having been through complete Engineering Studies at the School of Mines in Liege (Belgium), and having since had two years' practical experience in Mining and Surveying (one year in Scotland), good Draughtsman, Surveyor, and Chemist, speaking English, French, and German, WISHES to OBTAIN a SITUATION as CIVIL or MINING ENGINEER in a company or a civil and mining engineer's office. First-class references. No objection to travelling, or being appointed to a post abroad.
Address, "M. J. D.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

WANTED, a SITUATION as MINE AGENT, to Superintend the Working Department of any Gold, Tin, Copper, Lead, Phosphites, or Iron Mines, at home or abroad. Accustomed to dialling and mapping, and has a knowledge of the Spanish and Portuguese languages. Practical experience; seven years in Spain and Portugal, eighteen months in Brazil, and eleven years in Cornwall. No objection to proceed abroad to inspect and report on mineral properties. Satisfactory references and testimonials.
Address, "J. M. T.," Post Office, Redruth, Cornwall.

WHITE LEAD

WANTED, at an Established Works, a THOROUGHLY GOOD WHITE-LEAD MAKER, acquainted with all details. Good pay according to experience and capabilities.
Apply to "E. M.," Post Office, Newport, Monmouthshire.

WANTED,—A PRACTICAL MINE AGENT, of large Foreign and Colonial Experience, DESIRES a RE-ENGAGEMENT as MANAGER. Is thoroughly acquainted with metalliferous minerals and assaying. Phosphate of lime deposits and analysis a speciality. Inspection of mining properties undertaken, and estimates carefully made. A situation foreign preferred. Speaks Spanish. Security if required.
Testimonials and reference by addressing, in first instance, "Apatite," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

FOR SALE, a 28-in. cylinder rotary condensing ENGINE, with pumping gear, complete; and TWO BOILERS.
Application to be made to Mr. J. KITTO, Llanidloes, Montgomeryshire.

PUG MILL.

FOR SALE, ORE-MIXING MILL, by CLAYTON, 6 ft. high, by 4 ft. diameter, which has never been used.
Details on application to Kapunda Copper Company (Limited), 21, West Nile-street, Glasgow.

ROYAL SCHOOL OF MINES, JERMYN STREET.

PROFESSOR RAMSAY, LL.D., F.R.S., will COMMENCE a COURSE of FORTY LECTURES on GEOLOGY, on Monday next, the 15th of February, at Two o'clock, to be continued on each succeeding Tuesday, Wednesday, Thursday, and Monday, at the same hour. Fee for the course, £4.
MR. WARINGTON W. SMYTH, F.R.S., will COMMENCE a COURSE of FORTY LECTURES on MINERALOGY, on Monday next, the 15th February, at noon, to be continued on each succeeding Tuesday, Thursday, Friday, and Monday, at the same hour. Fee for the course, £4. TRENHAM REEKS.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Feb. 3	Great Darren	18	£19 14 0	Walker, Parker, & Co.
11	Van	420	15 6 0	ditto
	— ditto	60	15 6 6	Weston, Son, and Co.
	— ditto	60	15 10 6	ditto
	— ditto	60	15 6 6	Burry Port Company.
	— ditto	60	15 10 6	ditto
	— ditto	70	16 0 0	Panther Lead Company.
	— ditto	70	16 1 6	Glover and Robinson.
	—Talargoch	50	15 8 6	Walker, Parker, & Co.
	— ditto	70	15 15 6	ditto
	—North Hendre	35	15 8 0	ditto
	—Prince Patrick	50	15 5 6	ditto
	—Wagstaff	16½	13 8 6	Adam Eyton.
	—Gorsedd & Merllyn..	10	15 3 6	Walker, Parker, & Co.
	—So. Prince Patrick ..	15	14 17 6	Adam Eyton.
	—Duchess of West. ...	5	14 18 6	ditto
12	Rookhope	20	13 2 6	Shield and Dinning.
	—Old Treburgett	28	31 10 6	Nevill, Druce, and Co.
	— ditto	8	24 12 6	Treffry's Estate.

BLACK TIN.

Date.	Mines.	Tons	c.	q.	lb.	Price per ton.	Amount.	Purchasers.
Feb. 6	West Godolphin.	9	6	3	17	£55 0 0	£ 513 19 6	Bilitho.
	—So. Condurrow...	13	7	3	10	—	—	—

STATE OF NEW YORK, UNITED STATES OF AMERICA.

THE UTICA, ITHACA AND ELMIRA RAILROAD COMPANY.

Share Capital $2,000,000, of which $1,040,000 have been Subscribed and Fully Paid.
Issue of £300,000 (or $1,500,000),
being the entire Issue of the company's
FIRST MORTGAGE SEVEN PER CENT. STERLING BONDS.
In 1500 Bonds of £200 (or $1000) each.
Bearing interest at the rate of £7 3*s.* per cent. sterling per annum, payable in London, on the 1st July and 1st January in each year.
Redeemable at par in 1902. The redemption provided for by the operation of a sinking fund of £6000 per annum, and accumulating interest, commmencing in 1878.

DIRECTORS.

A. B. CORNELL, Vice-President of the Western Union Telegraph Company, New York.
GEO. J. MAGEE, President of the Blossburg and Corning Railroad Company and Fall Brook Coal Company, Corning, N.Y.
JOHN McGRAW, President First National Bank, Ithaca, N.Y.
Hon. J. H. SKELKREG, New York State Senator for the District, Ithaca, N.Y.
WILLIAM L. BURT, United States Postmaster, Boston, Mass.
JOSEPH RODBOURN, Lumber Merchant, Elmira N.Y.
O. B. CURRAN, Treasurer of the Ithaca Savings Bank, Ithaca, N.Y.
Hon. R. H. DUELL, Member of Congress for the District, Ithaca, N.Y.
C. C. TAYLOR, Merchant, Cortland, N.Y.
H. P. GOODRICH, Railway Superintendent, Cortland, N.Y.
C. H. BRANSCOMB, New York (late United States Consul at Manchester, England).
H. W. POOR (Messrs. H. V. and H. W. Poor, proprietors of "Poor's Railway Manual"), New York.

MESSRS. CUMMINS and CHINNERY will RECEIVE SUBSCRIPTIONS for the above BONDS at the rate of £175 per Bond (inclusive of accrued interest from 1st January, 1875), at which price the bonds will return £8,10*s.* per cent. per annum to investors.
Instalments payable as follows:—

£10	per Bond,	payable on	application.
35	,,	,,	allotment.
40	,,	,,	1st April, 1875.
40	,,	,,	1st May, 1875.
50	,,	,,	1st July, 1875.
£175			

Subscribers will have the option of paying up in full on allotment under discount at the rate of 5 per cent. per annum.
The Utica, Ithaca, and Elmira Railroad, 65 miles in length, runs in a north-easterly direction across the centre of the State of New York, between the Erie and New York Central Railways. It commences at Elmira and Corning, at which points it forms connections with the Northern Central Railroad and the Blossburg and Corning Railroad of Pennsylvania; proceeding eastwards it connects with the Pennsylvania and New York division of the well-known Lehigh Valley Railroad, the Delaware, Lackawanna and Western Railroad, and five other lines of minor importance, which extend north and south between the parallel lines of the Erie and New York Central Roads.
The Utica, Ithaca, and Elmira Railroad possesses, by its connections with so many important roads, unrivalled facilities for the receipt and distribution of traffic throughout the thickly populated district which it serves, and offers in addition the shortest and best route from the coal fields of Northern Pennsylvania to the cities of Utica and Syracuse, the New England States and Canada.
The three intersecting railroads first above mentioned are among the principal coal-carrying railways of the State of Pennsylvania, their aggregate coal tonnage carried northwards during the year 1873 amounting to 2,254,000 tons, for the whole of which the Utica, Ithaca, and Elmira Railroad will afford a route to the points of destination shorter than any other line built or projected.
The President of the Blossburg and Corning Railroad Company (whose coal tonnage for the year 1873 amounted to 1,020,000 tons), and of the Fall Brook Coal Company (whose production in 1873 was 312,466 tons), is one of the directors of the Utica, Ithaca, and Elmira Railroad Company, and is prepared, upon completion of the latter road, to enter into contracts guaranteeing to it all the coal traffic which it can accommodate.
Favourable contracts for the interchange of passenger traffic and freight have also been entered into with the Northern Central Railway, the Erie Railway, and the Geneva, Ithaca, and Athens Railroad, which last connects with the Lehigh Valley Railroad.
The receipts from coal traffic transportation will average at least 1½ cents per ton per mile, and the company will receive tonnage dues on 65 miles of road, equivalent to 97 cents per ton of through traffic. Assuming that the coal traffic carried by the company will amount to only 280,000 tons per annum (or little more than one quarter of that conveyed over the shorter road of the Blossburg and Corning Company), and calculating the working expenses at the high rate of 60 per cent. of the gross earnings, the coal traffic alone, exclusive of all local and general traffic, will provide the interest upon the entire bonded debt of the company.
Mr. James Macfarlane, the well-known author of "The Coal Regions of America," and the general sales agent of the Blossburg, Fall Brook, Morris Run, and McIntyre Coal Companies, whose production in 1873 amounted to 1,203,519 tons, in a letter to the President of the Utica, Ithaca, and Elmira Railroad Company, estimates that there will be open to the latter at least 500,000 tons of semi-bituminous coal to be transported annually to Syracuse and other points east of that city.
The cash expenditure upon the road has already been $1,800,000, of which sum $1,040,000 has been derived from subscriptions at par to the shares of the company, and the remainder from cash advances made by the proprietors of the neighbouring collieries, and others interested in the speedy completion of the line.
The proceeds of the bonds now offered for subscription will be applied, in the first place, to the completion and equipment of the road, and afterwards to the entire liquidation of the company's floating debt.
The work remaining to be done, as certified by the engineer of the company, comprises the construction of only seven miles of railway, and the laying of iron upon seven additional miles, the rails and fastenings for which have been delivered, and the grading done. The entire line will be completed and equipped in June next in time for the summer coal movement, which begins in July.
On the road and its equipments, freed from obligations and encumbrances of every sort, and thoroughly organised to meet the demand for traffic accommodation, the holders of bonds now offered for subscription will possess a permanent first charge.
The directors of the company are men of wealth and experience, and are closely identified with the company's road and the colliery and other interests which it serves.
The following is an exhibit of the results of the operations of the leading coal transportation companies in Pennsylvania, after payment of the interest on their debenture debt.

	Average Annual Dividend on Share Capital.
Delaware and Hudson Canal and Railroad Co. for 33 years divided	13·03 per cent.
Pennsylvania Coal and Railroad Company ,, 18 ,, ,,	14·53 ,,
Lehigh Valley Railroad ,, 11 ,, ,,	12·30 ,,
Delaware, Lackawanna, and Western Railroad ,, 9 ,, ,,	13·26 ,,
Philadelphia and Reading Railroad ,, 7 ,, ,,	10·71 ,,
New Jersey Central Railroad ,, 12 ,, ,,	13·17 ,,

Copies of the mortgage deed, of the sworn certificate of the president of the company, and of Mr. McFarlane's letter to him, may be seen at the offices of Messrs. Haywards, Keele, and Swann, solicitors, 5, Frederick's-place, Old Jewry, London.
In the event of no allotment being made the deposit will be returned in full; and if only a portion of the amount applied for is allotted, the surplus of the deposit money will be first applied towards the payment due on allotment.
On payment of the amount due on allotment scrip certificates to bearer will be issued, exchangeable after payment of the last instalment for fully-paid bonds of the company.
Failure in the payment of any instalment when due will render all previous payments liable to forfeiture.
Prospectuses and Forms of Application may be obtained of Messrs. CUMMINS and CHINNERY, 1, Angel-court, London, E.C., or at the London and County Bank, 21, Lombard-street, London, E.C., and branches.
Applications for Bonds on the accompanying form, together with a deposit of £10 per bond, must be sent to the bankers.

Messrs. HAYWARDS, KEELE, and SWANN, Solicitors, of 5, Frederick's-place, Old Jewry, certify that Mr. SWANN has personally examined in America the property and organisation of the company and the enactments governing the creation of this issue of bonds, and has satisfied himself that the issue is in comformity with the laws of the State of New York and of the United States, and that the bonds form a first charge on all the property of the railroad company.
13th February, 1875.

The SUBSCRIPTION LIST will OPEN on MONDAY the 15th INSTANT, and CLOSE on THURSDAY, the 18th INSTANT.

UTICA, ITHICA, AND ELMIRA RAILROAD COMPANY.

Price of Issue, £175 per £200 Bond.
FORM OF APPLICATION.
(To be retained by the Bankers.)
To Messrs. Cummings and Chinnery, 1, Angel-court, London, E.C.

GENTLEMEN,—Having paid to your credit at the London and County Bank the sum of £ , being 10*l.* per bond, on bonds of £200 each of the Utica, Ithica, and Elmira Railroad Company, I request you to allot me that number of bonds, and I hereby agree to accept the same, or any smaller number that may be allotted to me, and to pay the balance due thereon, according to the terms of your prospectus, dated 13th February, 1875.

Name in full .....
Address .....
Profession .....
Date .....1875 Signature .....

(Addition to be filled up if the applicant wishes to pay up in full on allotment.)
I desire to avail myself of the option given in your prospectus of paying up in full on allotment,
Signature .....

Notices to Correspondents.

SIR,—Would you be good enough to allow me to ask, through the Journal, some reader to inform me, or to put me in the way of ascertaining, the addresses of—1. Mr. Henderson, who, according to the newspapers, has arrived in this country as agent for the Chinese Government in procuring plant for coal and iron mining.—2. The Oriental Coal (or Coal Mining) Company, who have commenced, or are about to commence, operations in the Island of Borneo.—ENGINEER.

SOUTH PRINCE PATRICK.—I should be glad to know (not having seen in the Journal any report since January, 1874) when the second general meeting is to be held. The Prince Patrick appear to have half-yearly meetings, and have lately held their third to South Prince Patrick's first; of course, a balance-sheet ought to be sent at times to shareholders. I fancy the annual general meeting is compulsory—is it not?—LEAD MINES.

DETERMINATION OF MINERALS—"H. F." (Liverpool).—The book to which you refer is Franz von Kobell's "Tafeln zur Bestiurmung der Mineralien," the last edition of which was published a few years since—1870 or 1871—and is still obtainable of Messrs. Trübner, of Ludgate Hill. The price is 2s. 6d. The determination is effected by the use of the blow-pipe, assisted by easily made chemical tests by the wet way. There is a French edition by Prof. Pisani, at about the same price.

PATENT LAW—"W. T." (Redruth).—There is no examination in England previous to the grant of a patent, the responsibility of novelty being left to the inventor. It is difficult to say whether the English or American system is preferable; since although the latter gives a certain guarantee for the validity of the patent, it must not be forgotten that an inventor's improvement, and that which makes a worthless arrangement of the greatest value, consists in the variation of some apparently unimportant detail. This he frequently could not explain so as to make the matter clear to a Government examiner, and thus he would lose the whole benefit of a discovery which ought to yield him a fortune. In the interest of inventors protection should be obtainable for one year at a cost of not more than 10s. Not more than 5*l.* should be payable up to the filing of the complete specification, 20*l.* at the end of the third year, 25*l.* at the end of the seventh, and 50*l.* at the end of the tenth. In case of patents being extended beyond the 14 years, an annuity of 100*l.* might be charged upon them, and the extension should never exceed 7 years.

ANALYSIS OF MINERALS—"W. A." (Redruth).—There is probably no work better adapted to the use of practical men than that of Dr. H. M. Noad, of St. Mary's Hospital. It is so simple and lucid that if the merest elementary course has been followed the young chemist may become an expert analyst by its use alone. A man who attempts to become an assayer without being an analyst is compelled to limit his practice to the particular classes of ore he his familiar with; every little obstacle confuses him. The analyst, on the other hand, can learn assaying very quickly.

WHITE LEAD—"E. N." (Queen-street).—Several processes have been proposed for manufacturing white lead direct from the ore, those which appeared as promising as any being the inventions of Mr. T. Cobley and of Mr. J. A. Phillips, but they were not developed. The great object was to avoid the injurious portion of the manufacture. No doubt an invention for converting poor lead ore into white lead would be a desideratum. The suggestion to utilise the objectionable mixture of zinc-blende and lead by volatising the zinc, and making it into zinc white, and then utilising the lead by making white lead direct, has the merit of novelty if it has no other.

CASTLE GATE TIN MINING COMPANY.—Can any reader inform me who is secretary to this company, and where a letter will find him? Is anything being done at the mine, or is it closed?—J. C. B.

ROCK-DRILLS AND AIR-COMPRESSORS.—It is all well for Messrs. McKean and Co. to advertise rock-drills at 35*l.*, but I do not think it will prove much inducement to miners unless they can give us an air-compressor at about the same price. I was in London enquiring about rock-drills a twelvemonth ago, and should, probably, then have bought a McKean, or some other drill, but I was recommended—I think by Messrs. McKean—to have an air-compresser at 320*l.*, which they told me would work, I believe, six drills, the price of the drills being 125*l.* each; so that over 1000*l.* was required to make the trial, and the idea was, consequently, abandoned, for a practical miner with limited funds within reach would no more think of buying one drill, and a six-drill compressor to work it with, than he would of buying a stone breaker to crack nuts. If we could try one drill cheaply, and show the adventurers that a given quantity of work has been done, and that the cost of drill, air-compressor, accessories, power, and labour has been less than it would have been by hand labour, we could use them by dozens in many mines, especially as the working miners are not likely to object to them, seeing that, according to the statements in the *Mining Journal*, as many men will be employed underground as at present.—MINE AGENT: *Redruth, Feb.* 10.

DISTILLATION OF COAL AND PEAT—"K. R." (Athy).—No method has yet been discovered for utilising the products of distillation of peat so as to make it a commercial success, but the manufacture of oil, &c., from certain kinds of coal has been highly remunerative. Most of the peat processes have involved too much time, cost, and handling to be remunerative, and no such process is likely to be applicable, except to the heavier and denser kinds of peat. As to your suggestion to employ peat for making an improved quality of iron from pig metal, it would probably be found more economic to carry the pig-iron to the peat than the peat to the pig-iron. The re-melting of Bessemer scrap is so difficult that it can scarcely be hoped that it would prove remunerative to attempt to produce a high quality of steel with Bessemer scrap and peat.

BESSEMER CONVERTERS—"K. R." (Athy).—The Mersey Iron and Steel Company are understood to have converters of the greatest capacity in this country. Messrs. Bessemer's own works are of comparatively small capacity. A list of the Bessemer converters in use, stating where they are used and their capacity, shall be published.

Received,—"E. W. T."—"T. B."—"R. J."—"C. P."—"Shareholder" (Crenver and Wheal Abraham)—"E. H."—"J. H."—"Reader:" Yes—"N. R. T."—"Shareholder" (Lovell)—"M. P."—"One Interested"—"J. T. H."—"Shareholder" (Tankerville)—"Euclid"—We shall be glad of the information referred to by "M. E."—"Observer" on the Roche Mining District—Mr. Treweeke on the Providence Mine, and its Management. As Mr. T. is preparing "an historical sketch of the proceedings in connection with this mine for circulation among the adventurers" there is no necessity for inserting his present letter—"N. B."

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, FEBRUARY 13, 1875.

THE LIGHTING OF COLLIERIES WITH GAS.

There is scarcely anything of more importance in facilitating the transit of coal from the bottom of a mine to the surface than a good light. A long distance from where the colliers are delving with a safety-lamp, which barely makes the face of the coal visible in the surrounding sepulchral darkness, men and boys are hurrying to and fro close to the bottom of the drawing shaft, with full and empty corves, for on the energy of the hanger-on and his assistants depend the contiuous working, and sending away daily of a certain quantity of coal. A good light, under such circumstances, is indispensable, particularly in large collieries, where, in some instances, close upon a couple of tons are sent up nearly every minute, for a ton a minute is far below what is done at many pits more than 200 yards in depth. At many extensive collieries—and, indeed, at nearly all up to a comparatively recent period—oil lamps have been the medium for guiding the workmen at the bottom of coal mines, but of course their illuminating power would bear no comparison with ordinary coal gas. The Old Oaks Colliery, however, was an exception, for before the great explosion in 1866 there was a feeder about 1300 yards from the bottom, from which the gas was collected into a small holder, the daily quantity oozing out being sufficient to keep between 50 and 60 lamps burning night and day, so that the bottom was kept brilliantly lighted up, and the workmen were able to perform their duties with an advantage enjoyed by few other collieries. One of the principal drawbacks, however, to the adoption of gas for lighting up the bottom of collieries, especially those that were very deep, has been the expense of the works at the top, and the piping down to the bottom by the old system, and was a very serious obstacle indeed. That objection has now been overcome, and a system has been perfected by which gas can be sent down the deepest colliery we have at a very moderate cost indeed. The system to which we allude is that patented by Messrs. HUNTRISS and Co., of Doncaster, and first introduced at the Darfield Main Colliery, near Barnsley, where its success was so thorough and complete that it has since been adopted at several of the largest collieries in Yorkshire, as well as at South Hetton, North Seaton, and other places in the North of England, in Derbyshire, Notts, and Lincolnshire, and also in the Cannock Chase district, where the apparatus is now being put down at several places. The invention is known as that of the Steam Jet Gas Exhaust and Propeller, and by it the gas can be sent down mines or works at a considerable depth from the surface without the assistance of extra weighted gasometers. This is done by means of an infinitesimally small steam jet, which sends the gas down any depth so as to light up the hangings-on, main rods, stables, or indeed any part of the bottom of a mine that may be desired.

The advantages claimed for the invention are cheapness of construction, great simplicity, and non-liability to disarrangement, there being nothing of a complex character in any way connected with the apparatus. We recently had the opportunity of seeing the invention in full operation at a colliery between 200 and 300 yards deep, and it appeared to us to be all that could be desired, not the least interesting feature in connection with it being its marked simplicity. On the surface we found a small gasometer and retorts, the gas being made from the small coal, so that the cost of the fuel is comparatively trifling. An ordinary pipe, about 2¼ in. in diameter, conducts the gas from the holder to the main one, which conveys it to the bottom. A steam pipe is connected with the gas pipe, and the former, drawing from a boiler a small jet of steam, causes it to come in contact with the gas, and draws and forces it down the pipe leading to the bottom of the mine. The currents of gas and steam then combine and descend together to the bottom, where they are led into a receiving vessel of convenient size and shape, according to the quantity of gas required. The steam is then condensed, and collected as water at the bottom, flowing off by a syphon pipe, whilst the gas takes its course by a pipe from the top, and is distributed as required to the burners. At the colliery we allude to the gas was very bright indeed, far more so than that we found it in the village belonging to a company. The extent of the gasometer in a great measure depends on the quantity of gas required; the one we saw was about 15 ft. in diameter and 10 ft. deep. The pressure on the gasometer when we looked at it was, according to the water-gauge, just 4 in., whilst at the bottom it was only 2¼ in., there being at the time a very small quantity of steam in the jet. Looking at the steam jet-tap half open the water gauge was 8½ in., and with the tap open to its full extent the pressure was barely 12 in. There is the usual overflow pipe at the receiver, and everything about the entire apparatus is simple in the extreme from the top to the bottom. Nothing, indeed, could be better conceived for supplying a want that has long been admitted by our colliery owners—that of lighting the bottoms of shafts, and the stabling, lamp cabins (where underground), and some of the roads, with gas in a cheap and simple form—than the invention of Messrs. HUNTRISS and Co., and we are glad to be able to state that it has in every way been most successful, so that the patentees have met with the reward which they were fairly entitled to. The expense of the entire apparatus, independent of the pipes, we were informed, ranged from 30*l.* to 40*l.* only, a mere trifle, we should say, for the great benefit which accrues from the adoption of the steam jet gas exhaust or propeller in either large or small collieries.

At the present time Messrs. NEEDHAM, QUALTERS, and Co., of the Railway Foundry, Barnsley, are busily engaged in making the necessary plant for lighting up the bottom of the Rugeley and Cannock Company's colliery, as well as for several others.

ENGLISH RAILS ABROAD.

Another month's experience is now available in regard to the foreign demand for our railway iron. We are afraid it must be admitted that the results disclosed are little encouraging, upon the whole. The worst feature about our current iron trade statistics is the almost complete paralysis of the American demand for our railway *matériel*. Thus, while in January, 1873, we sent the United States 27,838 tons of our railway iron, our corresponding exports in the same direction only amounted in January, 1874, to 7444 tons, while in January, 1875, they further receded to 2376 tons. The value of our American railway iron exports has declined in an equally rapid ratio; thus, in January, 1873, this value stood at 327,027*l.*; in January, 1874, it had fallen to 87,159*l.*; and in January, 1875, it was no more than 27,997*l.* The three leading South American States—Brazil, Peru, and Chili—were tolerably good customers for our rails in January, our exports to the three countries named having been as follows in the first month of the last three years:—

Country.	1873.	1874.	1875.
Brazil ..... Tons	640	1621	1018
Peru	817	652	5923
Chili	21	1472	1660
Total	1478	3745	8601

But, after all, it is the colonial demand for our railway iron which has saved the iron trade from an almost complete collapse of the external demand thus far this year. Thus, in January, this year, our shipments of railway iron to British America, British India, and Australia, compared as follows with the corresponding shipments in January, 1874, and January, 1873:—

Colony.	1873.	1874.	1875.
British America ..... Tons	3	—	1,452
British India	1517	3596	5,113
Australia	1438	6105	8,796
Total	2958	9701	15,361

The animation in the colonial demand indicated by these figures is the one redeeming feature in our external iron trade just now, but it failed to avert the discouraging fact that the aggregate exports of railway iron in all directions from our shores only amounted in January this year to 36,171 tons, while in January, 1874, the corresponding exports in all directions amounted to 46,598 tons, and in January, 1873, to 50,233 tons. But for the good demand prevailing just now for our rails and accessories in India, Canada, and the Australias, the decline in the external demand for our rails in January, as compared with January, 1873, would have been at least 50 per cent.; it was not quite so bad as that according to the actual results disclosed, but, nevertheless, those results were discouraging enough in all conscience.

The question is whether the present active demand for our rails in India and Australia possesses the elements of permanence. It may, and possibly will, continue on a large scale all through this year, but we doubt whether it can be regarded as permanent. When the State lines which have at last been undertaken in India have been completed, the Indian demand must at once experience a marked contraction. There is certainly room at present for the development of a vast network of railways in Australia and New Zealand, but a continuance of deliveries of English railway iron to those interesting colonies must be very largely dependent upon the prices at which those deliveries can be made. If we can supply our Antipodean colonies with rails at a relatively low price, or, at any rate, at a reasonable price, they will, no doubt, be content to take them from us; but if high prices should be attempted to be enforced, we may depend upon it that the Australians and New Zealanders will begin to turn their own iron ores to substantial account.

COAL TRADE IN AUSTRALIA.—The directors of the Australian Agricultural Company, in their report for the forthcoming meeting, say that the coal trade was well maintained throughout the year. The selling price was 14s. per ton, and there was no interruption of work from any cause whatever. The first skip of coal was drawn from the new winding-pit in the month of April; and though the output has been much less than was anticipated, the deficiency was mainly due to the preference of the miners to the old works, and not to miscalculation or defect in any of the arrangements. This difficulty will gradually disappear, and the anticipated increase in the output will probably be realised during the present year. The total cost of the new pit and the approaches up to Sept. 30 was 6350*l.* The stone drift, by means of which the drainage of the mine is carried to the bottom of this pit, was completed in September. The large resources to the east of the Fault are being rapidly opened out, and, though the progress is slower than was expected, the yield from that part of the mine is already considerable. The sections of the seam in this district, furnished by Mr. Winship in his last report (November, 1874), show a minimum thickness of 11 ft. of coal, and it is represented to be of excellent quality. Boring operations for the further proof of the coal field have been commenced on the top of the ridge, near the coast, and at the date of the latest advices the hole was down 130 feet in hard rock. If no disturbance of the seam is found at this spot it will, probably, be reached at a depth of about 240 feet.

THE EXPORT COAL TRADE.—The exports of coal from the United Kingdom in January were on a comparatively small scale, having amounted to 781,047 tons, against 916,116 tons in January, 1874, and 799,227 tons in January, 1873. In these totals the exports to France figured for 190,960 tons in January this year, against 240,528 tons and 206,217 tons in January, 1874, and January, 1873, respectively. The exports increased in January to Sweden and Norway, Denmark, Brazil, and British India; but they decreased to Russia, Germany, Holland, France, Spain, Italy, Turkey, Egypt, Malta, &c. The value of the coal exported from the United Kingdom in January was 578,938*l.*, as compared with 943,861*l.* in January, 1874, and 834,568*l.* in January, 1873. In these latter totals France figured for 126,924*l.*, 225,474*l.*, and 204,235*l.* respectively.

THE ROCK-DRILL POPULARISED.—In order that price may be no obstacle to the introduction of the rock-drill, a cheap drill has, as will be seen from their advertisement in the Supplement to this day's *Mining Journal*, been introduced by Messrs. McKean and Co., of Lombard-street, whose machines have long been recognised as thoroughly good in principle, and of the best possible quality as regards manufacture. Messrs. McKean estimate that with their cheap drill every mining company can make a fair trial of the efficacy of machine drilling for 150*l.*, which allows 90*l.* for air-compressor, 35*l.* for a McKean drill, and 25*l.* for contingencies. They state that on the average machine drilling permits of sinking or driving four times as fast as hand drilling, and that working miners may be paid 10*l.* per man per month instead of 5*l.* per man per month, as at present, without adding to the cost per fathom; and that although machine drilling does not lessen the number of men that must be employed, the greater rapidity with which the work is done gives the mine adventurer or shareholder a large pecuniary advantage. Ordinary working miners can be taught to use any machine drill, whether it be a McKean, Burleigh, Kainotomon, Darlington, or any other, in a few hours, so that the labour arrangements of a mine would not be interfered with. Messrs. McKean are so satisfied that machine drilling needs only to be fairly tested to ensure its general use, and having full confidence that the superiority of their own machines will ensure their ultimate preferential adoption, that they do not hesitate to affirm that they would be glad to see the machines of any maker tried as a substitute for hand drilling, and that there is not a rock-drill in the market which, properly used, would not be more economic than hand drilling; and as Messrs. McKean were the first to advertise machine drills in Great Britain, it may be assumed that their experience entitles their opinion to respect.

TRADE OF THE TYNE AND WEAR.

Feb. 14.—The House, Gas, and Steam Coal Trades continue pretty brisk, and a fair price is realised for best descriptions, that is in the Tyne. In Durham the situation is not so good. Best coals in South Durham have been reduced 2s. per ton, and are now from 14s. 6d. at the pit. Unscreened manufacturing coals are sold at very low prices, some even at 5s. per ton. Coke is in fair request, and commands rather higher prices, and the best is 15s. 6d. per ton at the pits. There has been more pressure for delivery of late, parties buying forward as much as possible. The demand for Yorkshire and the West coast continues good. It has now been decided that the dispute with the Northumberland miners shall be referred to arbitration, and arbitrators and an umpire have been appointed. The reduction of the Durham miners will also shortly be brought forward.

The prices of pig-iron have been stronger, on account of the difficulties with the blast-furnace men. Considerable shipments have been made for foreign account, and also for Scotland, &c. Prices have not varied to any extent, the highest being about 64s., but the greatest demand is for No. 3 forge. The dangers that beset the trade on all sides are most formidable, as the blast-furnace men and the Cleveland miners, and also the Durham miners, have to be reduced. The mineowners meet on Tuesday, to consider whether they will submit the difference with the Cleveland miners to arbitration, as the men propose. The manufactured iron trade is dull. There is, of course, a small demand for ship-plates on account of the strike. The rail trade has not improved, and prices are rather receding. At Middlesborough, on Tuesday, there was a good attendance, and the market was moderately firm. The stock returns for last month showed an increase of nearly 10,000 tons in shipment. The greater part of the increase being due to enlarged demand for the Scotch trade. Makers stocks are not heavy, being 93,495 tons.

The question of additional railway communication with the north-eastern district is causing much excitement in the coal and iron trades. It is probable that an attempt will be made to form an independent line through the iron and coal districts of South Durham and North Yorkshire.

The following is the full return of the Cleveland Ironmasters' Association, issued to-day:—Make of pig-iron, month ending Jan. 13, 1875, 173,076 tons; month ending Jan. 31, 1874, 178,323 tons; decrease upon January, 1875, 5247 tons. Shipments, foreign, of pig-iron from port of Middlesborough, month ending Jan. 31, 1875, 17,572 tons; corresponding month last year, 8009 tons; increase, 9563 tons. Shipments coastwise of pig-iron from the port of Middlesborough, month ending Jan. 31, 1875, 23,680 tons; corresponding month last year, 23,424 tons; increase, 256 tons. Makers' stocks, Dec. 31, 1874, 89,737 tons; Jan. 31, 1875, 93,495 tons; increase upon December, 1874, 3758 tons, abstract; decrease in make upon December, 1874, 2837 tons; increase in makers' stocks upon December, 1874, 3758 tons.

REPORT FROM CORNWALL.

Feb. 11.—It seems to be almost idle to attempt to forecast the future in regard to the tin standard. Instead of a recovery, eager anticipation has been defeated by another fall, the one consoling feature of which is that it is definitely avowed that it is mainly made to meet the arrivals from Australia, shipped towards the end of last year, when the market began to improve. It will be recollected that we suggested that the last fall was due in the main to this cause; and now it is admitted that this was the case, the Australian imports coinciding with a large supply of Straits. It cannot be long, however, before the spurt subsides, and then the smelters, if they chose, will be able to improve prices without doing themselves any injury. Of course, they are not responsible for disturbing elements that arise abroad; but one now and then wonders how long they will act as if they were the only people to be considered, how long they fancy unremunerated adventurers will spend their money and their energies in raising tin for them to speculate with. Outsiders have an idea that the smelters might be fairly attentive to their own interests, and at the same time a little more considerate of other people's. An effect of the policy of the past few years is this, that there has been such a drain on the pockets of mining speculators in the county, that if the wildest hopes as to the tin standard were to be realised to-morrow there would not be anything like the excitement of the last *furore*. People really have not got the money.

Our anticipations with regard to the difficulties in South Wales seem in a fair way of being realised, so that, although there have been sundry advances in coals, we shall, in all probability, be spared the famine prices with which we were threatened. Miners have need to be grateful, for the avertion of this is anything but a small mercy.

Attention has been recently called to a point mooted in our reports some months since—the possibility and desirability of lessening the water charges of mines by a well-considered system of surface drainage. Some people have an idea that surface drainage is a matter of very little importance, but the difference between the water charges of a mine in summer and of the same mine in the wet season ought to convince them to the contrary. A few mines are more luckily situated than others—water may be kept out by some cross-course, or find an easier channel beneath a hard ley, but to the majority this is a very vital question, and yearly as the process of deepening goes on still more so. Quite independently of the fact that where pumping machinery is imperfect a good deal of water is only raised to run back again, it is quite certain that if adequate provisions were made to carry off the bulk of the rain waters as they fell it would be a very much more economical arrangement than letting them soak down into the earth to be pumped up again. It would not be possible to carry off the whole, but it would be quite feasible to get rid of the greater portion. This, however, is one of the benefits that cannot be attained until adjoining mines are content to adopt something in the shape of united action. It would be little better than throwing away money for the owners of one

small sett surrounded by others to undertake surface drainage single-handed. The success of the enterprise depends on the width of the area attacked. But where is the needed unity to come from, and who is to inaugurate this associated action? Will any of the lords take the matter up? They are by no means the least interested parties.

At length we are going to have the fair trial of the Darlington boring machine at Wheal Agar which has been so long projected. Of the merits of the Darlington—its simplicity and effectiveness—we have already spoken. At Wheal Agar it will be specially tested in the sinking of the engine-shaft, which it is of the first importance shall be sunk as quickly as possible. The company have incurred a large expenditure in erecting a powerful air compressor, with its accumulator and all appliances, and they have attached the same to their winding-engine, so as to have an abundance of power at command to give any speed to the drill that it may be found requisite to employ. As some days must elapse before they will be ready to receive the drill underground, the interim will give sufficient time to get the machine into good working order, and to train the miners in using it. Several trials have been made with the machine at the surface, and, apparently, with considerable success. Pneumatic pressure being got up to about 60 lbs. on the square inch in the accumulator, the air thus compressed is conveyed to the boring, or, rather, drilling machine, which in a few seconds is in rapid motion. The rate seems to be about, on an average, 250 strokes per minute, and, although the hands in attendance are as yet untrained, fully 2 in. per minute can be bored in the hardest granite rock. Great encouragement has been given to the exhibitors of boring machines by the Royal Cornwall Polytechnic Society, and it is to be hoped that their efforts in this direction will eventually be crowned with success, and that the machine now erected at Wheal Agar will accomplish all that the patentee claims for it. It is fully believed by many competent and practical miners that there will be a good mine in Wheal Agar when a greater depth is reached, as the lodes of the rich East Pool Mine traverse its entire length, and it is hoped that the company will be fully rewarded for their spirited outlay, and for the tenacity with which they have carried on their operations. It is contemplated by the directors of Balmynheer Mine to introduce one or more boring machines for the special purpose of boring deep holes in their wide stopes in the great Hownan deposit, so as to be able to bring out a large quantity of tinstone at a blast.

REPORT FROM LANCASHIRE AND CHESHIRE.

Feb. 11.—The struggle in South Wales has already had the effect of materially stiffening prices of coal in this district, and especially in South-West Lancashire, for although it is not here anticipated that the strike will be of long duration, and although consumers are witholding orders as much as possible, there is at Liverpool, Birkenhead, &c., a steady demand for shipping and steam coal, which has now mainly to be supplied from Lancashire. Inferior qualities of coal are, however, by no means easy to dispose of, and slack is now down at the low rate of 5*s.* or 6*s.* per ton. In St. Helen's this is a special drug on the market, the chemical trade continuing exceedingly dull. There is still a very poor demand for all descriptions of iron, and further reductions in prices are generally anticipated. At Barrow there are large stocks, but the production is now being restricted. As a consequence, iron ore is in poor demand, and in this department it is a long time since at this period of the year trade has been so dull.

Considerable attention is just now being directed to what is known as the "Oldham Joint Stock Mania." There is a perfect craze in that enterprising town, in the way of forming limited liability companies, as may be judged from the fact that in the local papers last week there were advertised 15 prospectuses; 13 of these were concerning cotton-mills—11 as going concerns, and two to be built—one iron company, and one insurance company. For the past fortnight "old mills," as they are called, have been launched at the rate of two per diem; and the companies which are proceeding, or are about to proceed, with the erection of new mills represent capital amounting to 1,400,000*l.* The extraordinary vitality thus imparted to the cotton industry of the town has, of course, a corresponding effect on other trades. A new boiler works has been started, and its shares are at a premium. It is stated that one machine works is about to be enlarged one-third, and the employees at Messrs. Pratt's establishment, though working night and day, cannot keep pace with the demand for machinery.

The difficulties experienced a short time ago in regard to the transit of coal in the neighbourhood are being enquired into by a committee of colliery proprietors, and it is hoped that the result will be the adoption of better arrangements in future. The cost to Lancashire caused by the inefficiency of railway companies was very serious indeed.

The Wigan Rolling-Mills Company is announced, with a capital of 50,000*l.* in 100*l.* shares. The company purposes to establish iron-smelting works and fire-clay and brick works on land at Wigan, close to the Lancashire and Yorkshire Railway.

REPORT FROM SCOTLAND.

Feb. 10.—A dull feeling has prevailed in our market during the past week, but there has been a considerable amount of business transacted in warrants from 73*s.* 9*d.* to 72*s.* 9*d.* To-day business has been done from 72*s.* 9*d.* to 73*s.*, closing with a firm tone at the latter price. The undernoted are the current quotations for shipping iron, from which it will be seen that the various brands can now be bought on rather easier terms than last week:—

			No. 1.	No. 3.
G.m.b. at Glasgow (deliverable alongside)			... 74*s.* 6*d.*–75*s.* 6*d.*	72*s.* 6*d.*–74*s.*
Gartsherrie	ditto	ditto	89 0	77 6
Coltness	ditto	ditto	90 0	77 6
Summerlee	ditto	ditto	90 0	77 0
Langloan,	ditto	ditto	90 0	75 0
Carnbroe	ditto	ditto	84 6	75 0
Monkland	ditto	ditto	75 0	73 0
Clyde	ditto	ditto	75 6	73 6
Govan, at Broomielaw, *ex* store,		ditto	75 0	73 0
Calder, at Port Dundas		ditto	90 0	77 6
Glengarnock, at Ardrossan		ditto	86 6	76 0
Eglinton	ditto	ditto	76 0	75 0
Dalmellington	ditto	ditto	77 0	75 0
Carron, at Grangemouth, selected,		ditto	87 6	—
Shotts, at Leith		ditto	89 0	77 6
Kinneil, at Boness		ditto	82 6	74 0
Bar iron			£ 9 10	—
Nail rods			9 10	—

SHIPMENTS.

Week ending Feb. 6, 1875	Tons 7,548
Week ending Feb. 7, 1874	7,303
Increase	245
Total increase for 1875	10,263
Imports of Middlesborough pig-iron into Grangemouth:—	
For the week ending Feb. 6, 1875	Tons 3,630
For the week ending Feb. 7, 1874	2,030
Increase	1,600
Total increase for 1875	3,956

From the figures above it will be seen that the iron market wears a very clouded aspect, with a reduction in makers' prices, as we led our readers to expect some few weeks ago. Still, the market is what is called steady—the shipping returns are in excess of last year, and iron continues to go out of store. This looks somewhat anomalous, so that we have really to do with a market peculiarly circumstanced—stocks accumulating in masters' hands, iron going out of store, and prices giving way.

Malleable iron is very depressed, English makers pressing the market with angles and plates at very cheap rates, and works here doing very little. One work which makes plates of every description—and will not accept specifications unless it includes both large and small plates—is pretty busy, but the other makers are very partially employed, at unremunerative prices. The shipments from the Clyde are also becoming limited, both in quantity and description. A number of the ironmoulders of Greenock, and the blacksmiths of Port Glasgow are on strike against a reduction of ½*d.* and ½*d.* per hour respectively.

The Coal Trade here has been rather active during the last week, and shipments for the week are returned at 55,972 tons, against 33,037 tons in the corresponding week of last year. The Ayrshire collieries have also been very active, but in Fifeshire the demand has slackened for house coal, and prices are easier. A large business continues to be done in gas coal, at prices ranging from 19*s.* 9*d.* to 25*s.* at the pits.

A project is being attempted to be organised to carry Scotch coal to London, but as yet no practical arrangement has been come to with the railway companies. The fact is that unless exceptional rates are granted it will be impossible for Scotch masters to compete with their English brethren in the metropolitan market. Some of the railway and shipping companies are looking favourably on the attempt, we understand; and as cheap coal is one of the wants of the metropolis, perhaps an attempt of this kind may at this juncture receive such consideration as may in the future render it a success. It will, however, depend greatly on the carrying companies whether the Scotch coalmasters will be able to compete with the English in the London market.

At the Association of Engineering and Shipbuilding Draughtsmen an interesting paper "On the Construction of Boilers," by the President—Mr. D. Halley—was read by the secretary. Mr. Halley thought there was no subject more in need of the careful attention of the engineer than the construction of boilers, more especially as the Board of Trade are gradually becoming more stringent in their requirements for a certain strength of boiler, and have lately issued new rules for the guidance of their surveyors in granting certificates. The best means to be adopted in order that the Board of Trade rules might be complied with were fully investigated, and a lively discussion followed, in which it was brought out that the difficulty did not lie so much in the designing and proportioning of the boilers to secure ample strength for safety, as in procuring a good quality of plates from the ironmasters.

THE SCOTCH MINING SHARE MARKET—WEEKLY REPORT AND LIST OF PRICES.

During the past week there has again been a large business done. In iron and coal shares Ebbw Vale, Merry and Cuninghame, and Omoa and Cleland have improved, while such of the others as have varied are to lower prices. Monklands are especially flat. Fife Coal shares are now 4*l.* paid, a call of 1*l.* per share having been made. In copper, &c., shares the movements are also generally adverse, Tharsis showing the heaviest reduction at 22⅜, being 1¼ per share lower than last week's price, but Canadian Copper Pyrites, Glasgow Caradon, and Yorke Peninsula are all a trifle higher. In Americans, Emma are firmer, but the chief feature is the good demand, which has sprung up for Javali shares, causing the price to move up considerably, owing to the small amount of shares offering; the tendency is still upwards. In oil shares prices are lower, with the exception of Young's Paraffin, which are ¼ higher at 5⅜, 5½. In miscellaneous more business has been done, but there is little alteration in prices. Amongst shares not unusually quoted Brittania Iron is 30 to 35; Court Grange Lead Mine, ⅛ to 1; and New Quebrada in demand at 3 to 3¼. A detailed list of the several days' business follows:—

On Thursday last the business done was small. Arniston done at 7. Benhar done at 14⅞. Bolckow, Vaughan "A" done at 55. Cairntable done at 6½. Canadian Copper Pyrites, 30*s.* to 32*s.* Ebbw Vale done at 19½, closing 19¼ to 19½. Emma, 34*s.* to 34*s.* Glasgow Caradon done at 25*s.* 6*d.* and 25*s.* 9*d.*, closing 25*s.* 6*d.* to 26*s.* Port Washington done at 4 for the 8*l.* paid share. Marbella lower done at 5½, closing 5¼ to 5 9-16ths; a dividend is recommended by the directors of this company of 5 per cent. per annum, corresponding with 10½ per cent. at this time last year. Merry and Cuninghame done at 57*s.*, closing about that price. Midlothian Mineral Oil nominally ¼ to ¾; the meeting of the shareholders of this company was held to-day at the office of the company in Glasgow, when besides the directors only three shareholders put in an appearance. The report submitted showed that the oil trade still continued in a very depressed state, and it had not, therefore, been judged advisable to resume operations. A shareholder moved that the company be wound up, and that the present secretary be appointed official liquidator, with a remuneration of 5 per cent. This motion did not, however, find a seconder, although the Chairman (one of the directors of the City of Glasgow Bank) showed a desire to do so, but his doing so was illegal, as it appears, according to the Companies Acts, a director cannot second such a motion. Another meeting is to be held in three weeks to see whether the company is to be wound up or not. It will be a pity if after spending 15,000*l.*, as the balance-sheet issued with the last report shows, on providing the best machinery, works, &c., the shareholders allow them to fall into the hands of anyone for a mere trifle, as is only too likely to be the case. The reason so few shareholders were present at the meeting is explained by the fact that they are scattered all over the country from Aberdeenshire to the very South of England, and appear to have lost all hope. But it is quite probable that if they could make or support some movement to get the management into their own hands, considering that the Dalmeny and Young's Paraffin Companies contrive to make fair profits, they might attain very different results. Monkland ordinary weak at 72*s.* to 73*s.* Niddrie done at 68*s.*, closing 66*s.* ro 67*s.* Omoa and Cleland firmer, done at 2¾. Tharsis done at 23⅞, closing 23⅞ to ¾. Scottish Wagon a trifle lower, at 12 3 16ths to 12¼, and the new shares changed hands at 23*s.*, being an advance of 1*s.* It will be noticed that at 23*s.*, which is equal to 11*l.* 10*s.* for 10*l.* worth, these new shares are fully ⅝ under the price of the original shares, and, therefore, the most advantageous to buy, the rate of dividend being the same—8 per cent.

On Friday the business done was again small. Arniston done at 7. Bolckow, Vaughan A shares at 55. Canadian Copper Pyrites, 30*s.* to 32*s.* Ebbw Vale, 19½. Emma, 35*s.* to 36*s.* Glasgow Caradon, 26*s.* 6*d.* to 27*s.* 6*d.* Port Washington (all paid) firmer, at 4¾ to 5. Kapunda, 1*s.* 3*d.* to 6*s.* 3*d.* Huntington, 51*s.* 6*d.* to 52*s.* 6*d.* Marbella done at 5 7-16ths, closing 5¾ to 5½. Merry and Cuninghame shares firmer, done at 57*s.* 6*d.* and 58*s.*, closing at these prices. Monkland ordinary shares done at 72*s.*, 71*s.* 6*d.*, 71*s.*, and 70*s.*, closing 70*s.* to 71*s.*; guaranteed preference lower, at 7¼ to 7¾. Niddrie, 66*s.* 6*d.* to 67*s.* 6*d.* Scottish Australian lower, at 1 7-16ths to 1½. Tharsis done at 23¾ and 23 11-16ths, closing 23⅝ to 23¾. Scottish Wagon shares done at 12 3-16ths; and the new shares were good, being done at 24*s.* 6*d.* and 25*s.*, closing 25*s.* to 26*s.* This improvement in the price of the new shares now makes the original shares the best to buy, as 26*s.* for a new share is equal to 13*s.* for an original. London and Glasgow Engineering shares were again in demand, and advanced to 23¾, buyers. Yorke Peninsula ordinary firm, at ¼ to ½.

On Saturday a fair business was done. Canadian Copper Pyrites shares done at 30*s.* and 30*s.* 6*d.*, going at these prices. Cape Copper, 30½ to 31. Ebbw Vale, 19½ to 20. Emma shares done at 1¾, closing 34*s.* to 35*s.* Flagstaff, 2½ to 2¾. Glasgow Caradon, 26*s.* 6*d.* to 27*s.* 6*d.*; the next sale of ore by this company will be 240 tons, on Feb. 11; this compares with 250 tons at this time last year, but the price which will be realised now will at least be 1*l.* per ton better; last month's sale was also 240 tons. Port Washington firm at 4⅞ to 5. Javali in good demand at 6*s.* 3*d.* to 7*s.* 6*d.*, with few shares offering. Marbella done at 5½, closing 5 7-16ths to 5½. Merry and Cuninghame done at 58*s.* and 57*s.* 6*d.*, closing 57*s.* to 57*s.* 6*d.* Monkland ordinary done at 70*s.*, 69*s.* 6*d.*, and 69*s.*, closing 69*s.* to 68*s.* 6*d.* Omoa and Cleland firm, done at 48*s.* 6*d.*, closing 48*s.* to 49*s.* Panulcillo, ⅞ to 1⅛. Russian Copper shares advanced, at 2⅞ to 3⅛. South Roskear nominal, at 5; the mine sold on the 4th inst 20 tons of copper ore, at 42*s.* Tharsis done at 23 9 16ths and 23½, closing at 23½. West Maria and Fortescue, ¼ to ¾. Scottish Wagon shares done at 12 7-16ths, and the new shares also changed hands at 26*s.*

On Monday a good business was done. Canadian Copper Pyrites, 30*s.* to 31*s.* Cape Copper 1 higher, at 31½ to 32. Ebbw Vale, 19½ to 20. Emma done at 31*s.* 6*d.* and 33*s.*, closing 32*s.* to 33*s.* Flagstaff firm, at 2⅛ to 2¾. Glasgow Caradon firm, done at 27*s.*, closing 27*s.* to 27*s.* 6*d.* Javali were again in demand, and improved at 7*s.* 6*d.* to 8*s.* 9*d.* Huntington lower, done at 2½, closing 49*s.* to 50*s.* Marbella done at 5 7-16th, closing 5½ to 5 7-16th. Merry and Cuninghame were largely dealt in, from 57*s.* to 58*s.*, closing firm, at 58*s.* to 59*s.* Monkland ordinary, done at 68*s.* 6*d.*, closing 68*s.* to 69*s.*; Guaranteed preference done at 7½, closing firmer, at 7⅛ to 7¾. Niddrie done at 67*s.* North Cornwall Kaolin remain at 1. Omoa and Cleland good, done at 2¼, closing 50*s.* to 51*s.* Tharsis done at 23½ and 23 7-16th, closing 23⅜ to 23½. Scottish Wagon new shares done at 26*s.*, closing 25*s.* 6*d.* to 26*s.* Yorke Peninsula, ordinary, close 5*s.* to 6*s.* 3*d.*

On Tuesday (being contango-day) a small business was done. Bolckow Vaughan, A, 55 to 55¼. Canadian Copper Pyrites, 30*s.* to 31*s.* Colorado Terrible remain at 3⅛ to 3⅞; advices from the agent of this company, dated 15th ult., state that first-class ore to the value of over 86019 has been sold for cash. He states that it will not now be necessary for the board to remit further money, and the company has, therefore, in cash and bills for ore sold in Liverpool, 6417; ore in Liverpool not yet sold, 800*l.*; ore in transit, 500*l.*: total, 7717*l.* The dividend to be paid on the 10th inst. will absorb 4200*l.* of this amount. The mine continues throughout all its workings in a satisfactory state. Ebbw Vale improved to 19¼ to 19⅞. Emma done at 33*s.* and 36*s.* 6*d.*, closing 36*s.* 6*d.* to 37*s.* 6*d.* Glasgow Caradon new shares, 18*s.* to 19*s.* Javali again in demand, closing 8*s.* to 9*s.* Kapunda, 1*s.* 3*d.* to 6*s.* 3*d.* Marbella done at 5 7-16th, closing 5¾ to 5½. Merry and Cuninghame firm, done at 58*s.* and 58*s.* 6*d.*, closing 58*s.* to 59*s.* Monkland ordinary lower, at 68*s.* 6*d.* to 67*s.* 6*d.* Rio Tinto, 9⅛ to 9⅝. Russia Copper lower, at 2⅛ to 2⅞. Tharsis weak, done at 23¼ to 23⅛ and 23, closing 22⅞ to 23; new shares, 16 to 16¼. Scottish Wagon, 12⅛ to 12¼; and new shares, 25*s.* to 26*s.* Yorke Peninsula ordinary firm, at 5*s.* to 6*s.* 3*d.* The following were the rates of continuation current to-day:—Contangos: 2*d.* on Canadian Copper Pyrites; even 1½*d.* on Emma; 1*d.*, 1⅛*d.* on Glasgow Caradon; 4*d.* on Port Washington; 3*d.* on Huntington; 3*d.* on Marbella; 2*d.*, 3*d.*, 3½*d.* on Monkland ordinary; 3*d.* on Niddrie; 2*d.* on Omoa and Cleland; 1*s.* on Tharsis; 1*s.* and 1*s.* 9*d.* on Tharsis new; 1*s.* 6*d.* on London and Glasgow Engineering. Backwardations: even, 1*d.* on Merry and Cunninghame; 6*s.* 3*d.* on Shotts Iron.

On Wednesday the account for settlement on the 26th inst. opened. Tuesday, the 23rd inst., will be contango-day. A fair business was done. Bolckow Vaughan A done at 55. Canadian Copper Pyrites, 30*s.* to 31*s.* Cape Copper, 31 to 32. Dalmeny Oil is now quoted, ex div., at 111*s.* 6*d.* Ebbw Vale, 19½ to 20. Emma done at 36*s.* 3*d.*, closing 36*s.* to 37*s.* Glasgow Caradon done at 27*s.*, closing 26*s.* 6*d.* to 27*s.* 6*d.* Islay remain at ¼ to ½. During the last 18 months lead to the value of 2000*l.* has been extracted from the property of this company and sold; and, though very little has been done towards proving the mine, yet sufficient to convince anyone of its worth. Javali again in good demand, closing at a further rise, at 8*s.* 9*d.* to 10*s.* Port Washington done at 4⅞, closing 4⅞ to 5. Lochore and Capledrae done at 7¼, closing 7⅝ to 7¾. Marbella done at 5½ and 109*s.*, closing 5 7-16ths to 5½. Merry and Cuninghame done at 58*s.*, closing 57*s.* 6*d.* to 58*s.* Monkland ordinary very flat, opened at 66*s.*, but declined to 59*s.*, then recovered to 63*s.*, closing flat again at 3. Tharsis also flat, opened at 23, but declined to 22⅛, closing firmer, at 22¾; new shares, 15¾ to 16. Young's Paraffin firm, at 5⅜ to 5½. London and Glasgow Engineering, 23¾ to 23¼. Scottish Wagon are now quoted, ex div., the original shares at 11¾, and the new shares at 25*s.* 3*d.* Yorke Peninsula ordinary higher, at 6*s.* to 7*s.* Subjoined will be found the latest prices:—

COAL, IRON, STEEL.

Amount share.	Amount paid-up.	Name.	Latest price.
£10 ...	6 ...	Arniston Coal (Limited)	7
10 ...	10 ...	Benhar Coal (Limited)	14⅞
100 ...	35 ...	Bolckow, Vaughan, and Co. (Limited) ... A.	55
10 ...	7 ...	Cairntable Gas Coal (Limited)	6½
10 ...	10 ...	Chillington Iron (Limited)	6
32 ...	29 ...	Ebbw Vale Steel, Iron, and Coal (Limited)	19¾
10 ...	4 ...	Fife Coal (Limited)	6
10 ...	8 ...	Glasgow Port Washington Iron and Coal (Limited).	4
10 ...	10 ...	Ditto All paid	4¾
10 ...	10 ...	Lochore and Capledrae (Limited)	7¾
10 ...	10 ...	Marbella Iron Ore (Limited)	109*s.*
10 ...	3½ ...	Merry and Cuninghame (Limited)	58*s.*
10 ...	10 ...	Ditto All paid	9⅛
10 ...	10 ...	Monkland Iron and Coal (Limited)	3
10 ...	10 ...	Ditto 7 per cent. Guaranteed Preference.	7½
100 ...	100 ...	Nant-y-Glo and Blaina Ironworks pref. (Limited) ...	40
10 ...	2 ...	Niddrie Coal (Limited)	3⅜
10 ...	4 ...	Omoa and Cleland Iron and Coal (Limited)	2¼
1 ...	1 ...	Scottish Australian Mining (Limited)	1½
1 ...	5*s.* ...	Ditto New	6*s.* 3*d.*
50 ...	50 ...	Shotts Iron	77
10 ...	4	Ditto New, issued at 2½ premium	6

COPPER, LEAD, SULPHUR, TIN.

10 ...	7 ...	Canadian Copper Pyrites (Limited)	1½
10 ...	10 ...	Ditto All paid	6⅛
10 ...	7 ...	Cape Copper (Limited)	31½
1 ...	1 ...	Cwm Bychan Silver-Lead (Limited)	⅛
1 ...	1 ...	Cwm Lery Lead (Limited)	½
— ...	5 ...	Drake Walls	5
2 ...	2 ...	Dunsley Wheal Phœnix Tin (Limited)	¼
1 ...	1 ...	Glasgow Caradon Copper Mining (Limited)	27*s.*
1 ...	15*s.* ...	Ditto New	18*s.* 6*d.*
— ...	5¼ ...	Gunnislake (Clitters)	1¾
10 ...	9 ...	Huntington Copper and Sulphur (Limited)	2½
1 ...	1 ...	Islay Lead (Limited)	½
25*s.* ...	23*s.* ...	Kapunda Mining (Limited)	¼
4 ...	4 ...	Panulcillo Copper Mining (Limited)	⅞
10 ...	10 ...	Rio Tinto (Limited)	9½
10 ..	10 ...	Russian Copper Mining (Limited)	2¾
— ...	6 ...	South Roskear	5
10 ...	10 ...	Tharsis Copper and Sulphur (Limited)	22¾
10 ...	7 ...	Ditto New	16
— ...	89*s.* ...	West Maria and Fortescue	¾
1 ...	1 ...	Yorke Peninsula Mining (Limited)	6*s.* 6*d.*
1 ...	5*s.* ...	Ditto 15 per cent. Guaranteed Preference	¼

GOLD, SILVER.

5 ...	5 ...	Colorado Terrible Mining (Limited)	3¾
20 ...	20 ...	Emma Silver Mining (Limited)	36*s.* 3*d.*
10 ...	10 ...	Flagstaff Silver Mining (Limited)	2½
2 ...	2 ...	Javali Gold Mine (Limited)	½
5 ...	5 ...	Last Chance Silver Mining (Limited)	1

OIL.

10 ...	7 ...	Dalmeny Oil (Limited)	111*s.* 6*d*
5 ...	5 ...	Midlothian Mineral Oil (Limited)	¾
10 ...	8 ...	Uphall Mineral Oil (Limited)	⅛
10 ...	10 ...	West Calder Oil (Limited)	2¼
10 ...	8½ ...	Young's Paraffin Light and Mineral Oil (Limited) ...	5⅜

MISCELLANEOUS.

10 ...	10 ...	Conglog Slate and Slab (Limited)	10¾
10 ...	9 ...	Highland Peat Fuel (Limited)	7
50 ...	25 ...	London & Glasgow Engineering & Iron Shipbuilding	23⅝
1 ...	1 ...	North Cornwall Kaolin (Limited)	1
20 ...	9½ ...	Peruvian Nitrate (Limited)	7
10 ...	10 ...	Scottish Wagon Company (Limited)	11¾
10 ...	1 ...	Ditto New	25*s.* 3*d.*

Last day for this account Feb. 23; settling day, Feb. 26.

NOTE.—The above list of mines and auxiliary associations is as full as can be ascertained, Scotch companies only being inserted, or those in which Scotch investors are interested. In the event of any being omitted, and parties desiring a quotation for them and such information as can be ascertained from time to time to be inserted in this list, they will be good enough to communicate the name of the company with any other particulars as full as possible.

J. GRANT MACLEAN, Stock and Share Broker.
Post Office Buildings, Stirling, Feb. 11.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Feb. 11.—The South Staffordshire Coal Trade has a decidedly easier tendency this week, and a reduction of 2*s.* per ton which has been declared in the price of Pelsall "deep" coal—bringing the rate to 13*s.* per ton—is generally regarded as the first step towards a general reduction. Although at the time of writing neither the Earl of Dudley nor the Cannock Chase firms have announced their intention, circulars declaring a similar drop are looked for by every post. In this state of suspense business has, naturally, been restricted to positive requirements of consumers, and the influence has extended itself to the iron trade and other great coal-consuming industries. Common furnace coal is offering at 9*s.* at the pits, but nothing of a reliable quality is to be had under 11*s.* per ton. Ironstone of native yield is in steady demand at the rates quoted last week.

A private joint-stock company has been formed, with Lord Calthorpe as chairman, to prove and work the coal and ironstone measures believed to underlie the Hampstead estate—an area of 1500 acres—between Walsall and Birmingham. The subscribed capital is 100,000*l.*

The South Staffordshire Iron Trade shows increasing weakness, both in the pig and finished departments, and prices, although without declared alteration, are somewhat easier. Pigs are on the basis of 3*l.* 5*s.* for common cinder, and 5*l.* 5*s.* for all-mine, but transactions are taking place at 2*s.* 6*d.* to 5*s.* per ton below those quotations. Mr. Firmstone has decided to blow out two of his furnaces at Crookhay, owing to the difficulty he experiences in disposing of his pig-iron at anything like remunerative rates. The Chillington Company (Limited) have re-lighted one of their furnaces at Bentley, near Walsall. Finished iron of the commoner brands have been freely offered at the easier rates of last week. The cheapest class of bars have sold at 8*l.* 17*s.* 6*d.*, and sheets and plates of similar quality, although quoted 12*l.* 10*s.*, have changed hands at a fraction over 12*l.* per ton. Sheets and plates of medium and better qualities are in strong demand, and quotations are well supported.

Messrs. J. B. S. and C. Lees, of the Albion Ironworks, West Bromwich, have purchased a mill and forge in close proximity, which they have styled the Nelson Ironworks, and which they propose to devote to the manufacture of all kinds of merchant, guide, and strip iron. Operations are to be commenced immediately.

The Earl of Dudley has introduced a gas furnace of Belgian invention, for re-heating purposes at his Round Oak finished ironworks. So far as it has been tried the results are pronounced very satisfactory.

Colliery proprietors and mining engineers of this district have been anticipating with some interest the first examination for mine managers' certificates by the new board of examiners. They will learn with satisfaction that it has passed off, not only smoothly, but likewise creditably to all concerned. The examination took place on Monday, at the Swan Hotel, Wolverhampton, and the examiners were Dr. Hill, of Birmingham; Mr. Jonah Davis, civil engineer, of Wolverhampton; and Mr. David Peacock, mining engineer, of Tipton; whilst Mr. W. Blakemore, F.G.S., was the secretary in attendance. The examiners had before them 17 candidates—15 from this district, one from Sheffield, and one from Nottingham. All these had to fill up four papers, in which they had to satisfy the examiners as to their knowledge about chemistry and ventilation, pumping and winding machinery, surveying and laying out collieries, and practical mining and underground management. On all these subjects there was likewise a *viva voce* examination. The work was got through in one day, but the day was 12 hours, extending from 10 in the morning till 10 at night. There is much reason to conclude that the gratification of the candidates will not only have relation to the way in which the examination was conducted, but will likewise apply to the result of it as demonstrated in the communications which may be looked for from the Home Office.

To-day's quotations on the Birmingham Stock Exchange included the following:—J. Bagnall and Sons (Limited), 6, buyers; Chillington Iron, 6; Ivy House and Northwood Colliery, 1 prem., sellers; Cannock and Huntington Colliery, ⅛ dis., buyers; Sandwell Park Colliery, 35, sellers; Staffordshire Wheel and Axle, 2½ prem.; Patent Shaft and Axle, 5½ prem.; Muntz's Metal, (5¼ paid), 4¼ prem.; Gloucester Wagon, 16¼, sellers; Birmingham Wagon, 19¼, buyers. The Gloucester Wagon Company have declared an interim dividend, at the rate of 10 per cent. per annum, for the last half-year.

The Iron Trade of North Staffordshire and Shropshire respectively

will shortly lose two of the best known and most influential members in the persons of Col. Roden and Mr. T. Horton. Col. Roden, who has for many years been at the head of the Shelton Bar Works of Earl Granville, has resolved to retire from business life; and Mr. T. Horton, the able manager of the Lilleshall Coal and Iron Company, has arrived at a similar determination. Both gentlemen have well earned the repose they now seek, and they will carry with them into private life the respect and good wishes of the trade in both districts. Nothing is yet decided as to their successors.

The demand for finished iron in North Staffordshire is fairly sustained so far as ordinary bars are concerned, but for the larger sizes of bar-iron and plates the enquiries are less numerous. Some heavy lots of puddled bars have been ordered for shipment, and now that the Baltic ports are re-opened the shipping demand for iron from this district may be expected generally to improve. Ironstone and ore are in request, but the coal trade is quiet.

REPORT FROM MONMOUTH AND SOUTH WALES.

Feb. 11.—The present has differed to but a very small extent from the last and previous weeks, the attitudes of the masters and men remain unaltered, the lock-out continues, and the position taken by the masters only the more confirm the belief that they are determined to carry out their reduction, and enforce submission on the part of the men. This, perhaps, will not be, as there is a belief amongst those who are likely to be authorities on such matters that the next step on the part of the employers will be to declare another reduction of 10 per cent. and then the men will not only have to accept a 10 per cent. but a 20 per cent. drop in their rate of wages. It is expected when this announcement is made there will be a speedy termination to the lock-out, for it will be agreed with the men who will accept the masters' terms that they shall be allowed to resume operations. There is no doubt that the great majority of the men, if allowed to, are quite willing to work at present, for distress amongst them has become so great that they are much more ready to work on the masters' rate of remuneration than remain idle. The Union leaders have been much amongst the men, endeavouring to resuscitate a liking for Unionism, but though it must be admitted that a large number of men have recently joined the association, there is no doubt that the Union has got very much out of favour in the district, and those who have long belonged to it put no credence or amount of money in its funds. There is loud grumbling against the tardiness with which assistance comes to them now that it is needed.

As to the Iron Trade, there is very little that is new to record. Some portion of some works are still, however, in employment on some small contracts, and will continue so for another week or two, when the stock of coal will have been exhausted. Advices indicate that there has been a slight movement in the iron market. During the week there has been a little more activity in the inquiry for railway iron, but, under the circumstances, few of the orders can, of course, come to this district. It may be said that even those now under execution are being worked out at a loss of some shillings per ton. The tin-plate works are still fairly employed, and scarcely any change has taken place in the trade from week to week.

A few collieries belonging to unassociated masters are as busily employed as is possible for them to be, and the proprietors are taking all the advantage they can of the lock-out; a ready market is found for the out-put, and every effort is made, by employing additional hands, to increase the get. And, apart from this, there is no new feature to be noticed in the Coal Trade. Coal has just been struck at Gelli, and the Llwyncelin, this week, the property of Messrs. Thomas and Griffiths, in the Rhondda Valley. The seam is 4 ft. 2 in. in thickness in this place. Some hundreds of locked-out men have during the last few days applied to the board of guardians in the district for relief. Steps are being taken to employ the men at stone-breaking. Dividends at the rate of 10 per cent. per annum and a bonus of 2½ per cent. have been declared by the Bristol and South Wales Wagon Company for the last half-year; and a dividend of the Taff Valley Railway Company, for the last half-year, at the rate of 10 per cent. per annum, with a bonus of 1 per cent., has also been declared.

At the Bridgend Petty Sessions, Mr. Wm. Jenkins, manager of the Nantymoll pit, Ogmore Valley, was fined 20*l.* and costs for neglecting constantly to provide sufficient air to dilute the noxious gases. Five men were killed by the explosion which resulted. T. Stevens, the foreman sinker, stated that he was down in the pit on the morning of the explosion. He then gave the dimensions of the pit. The stage was about 14 yards from the water. There was nothing for ventilating the pit below the stage but a pipe which was used for collecting water. This pipe reached from about 2 ft. above the stage to 2 ft. below. The chief object of this pipe was to keep the water off the men. The light was nearly blown out sometimes because of the current of air created by the falling of water. If it were allowed to drop down instead of through the pipe the lights would be blown out. The blower was about 17 yards from the bottom of the pit, and no means were adopted to deal with it. There was gas given out by the blower when they were working at the bottom, but witness did not see any after it was covered with water. Witness had seen gas finding its way through a small quantity of water, but had not noticed it where the water was any depth. He had no opinion to form as to where the gas came from, if it did not come from this blower. He did not from first to last receive any instructions whatever from Mr. Jenkins as to how he should deal with the blower or with the water that was in the pit. The men were working in the pit daily, and examined it at the end of every week. Mr. T. E. Wales, the Government Inspector, said he had made an inspection of the pit in question, and, from the evidence he had heard, he had no doubt whatever as to the nature of the explosion which took place on Dec. 7. It was undoubtedly an explosion of gas; the space below the stage was filled with inflammable gas from the blower, and had become ignited, thus causing the explosion. The Bench, after a short consultation, said they were unanimously of opinion that the only reasonable theory was that set up by Mr. Wales, that the explosion had occurred in consequence of the blower. They were also of opinion that defendant had not taken proper means to make himself cognisant of the state of the pit.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

A considerable change has taken place in respect to the carriage of coal to London by the various lines of railway connected with our mining districts, and having termini in the metropolis. The consumption during January shows a falling off as compared with the previous month of no less than 28,677 tons. This decrease should be taken in connection with the fact that prices were much higher than they had been before, Silkstones selling at 34s. per ton, or 3s. per ton more than they are at the present time. This fully bears out what has been so frequently stated, that high prices lead to a greatly diminished consumption. One of the most noticeable features of the traffic during last month was the very great decrease in the quantity of coal carried by the Great Northern, which was 27,374 tons less than in January, being equal to a loss of revenue of upwards of 8000*l.* The Midland has fully held its position, carrying by far the largest tonnage of any of the railways, in some measure due to the fact that the coal field through which it passes is much nearer to London than that traversed by any other line. On the other hand, there has been a great decline in the carriage of the Great Eastern, which has nearly 20,000 tons less than in December. The increase of 8000 tons by the Great Western is principally attributable to the blowing out of a good many blast-furnaces, by which much of the coal that would otherwise have been consumed in the production of pig was thrown into the markets. From the Leicestershire coal field a large tonnage of coal was carried over the Midland, and the same has been the case with respect to the pits in Nottinghamshire. The following figures show the quantities carried by railways during the last two months:—

	December.	January.
Midland	Tons 138,758	Tons 145,666
Great Northern	108,217	80,843
London and North-Western	79,067	82,256
Great Eastern	67,223	47,122
Great Western	46,818	54,821
London and South-Western	3,167	3,817
South Eastern	993	1,035
Total	Tons 444,243	Tons 415,566

Taking the Great Northern we find that nearly the whole of the decrease falls to the share of the South Yorkshire district. Of Silkstones, Newton, Chambers, and Co., whose coal enjoys a high reputation in the London market, last month only sent about 4000 tons, being upwards of 3000 tons less than in December. Coopers also sent about 1500 tons and Silkstone Main 1000 tons less. The seven leading collieries sending Silkstones to London over the Great Northern in January carried 13,300 tons against 27,700 tons in December. Of the Thick coal going from South Yorkshire there was also a large falling off, the Oaks having only forwarded about 1500 tons, being 1300 tons less than in December. Front Gawber Hall there was a decline of about 1000 tons, Lund Hill 1000 tons, and Blacker 600 tons. The 13 collieries that in December forwarded 32,700 tons were last month only credited with 14,800 tons. The largest quantity carried by the Great Northern was from Usworth Colliery, belonging to Messrs. Jonassohn and Elliott, in the North of England, near to Washington Station, and from which last month upwards of 9000 tons were taken to London. For some months past very little coal was sent from the pits in West Yorkshire; although at one time a large tonnage was exported from the Glass Houghton, St. John's, Sharlstone, and the West Riding Collieries. However, in December those places only forwarded 3200 tons and 4800 tons last month. From Derbyshire a full average tonnage was carried last month by the Midland, and the company is affording every facility for the extension of the traffic on its line by branch lines to the collieries, as well as by increasing the siding accommodation.

Last month upwards of 130,000 tons of coal were sent from Langley Mill, which will be one of the most important centres of the coal traffic in Derbyshire, and where the Great Northern, by its line from Nottingham to Derby, will join issue with the Midland, and fight for the conveyance of the minerals to the South. From Codner Park between 5000 and 6000 tons were forwarded to London last month, and this, no doubt, will be increased by the line just opened between that place and Ambergate. There was an increase in the tonnage sent during January from Tibshelf (1700 tons) and Shipley. The twelve principal collieries sending to London, including Clay Cross, in January carried 103,224 tons, against 111,211 tons in December. It will be seen that the London and North-Western took about 7100 tons more in January than in December; but this appears to have been exceptional, for, owing to the complications in South Wales, it carried during the former month upwards of 16,000 tons from Aberdare, Merthyr, and Hirwain. For the same reason there has been a great increase by the Great Western. There is every appearance now that coal will be much cheaper than it has been for a very long time, if only from the fact that the number of collieries in the kingdom has increased, 3001 in 1872 to 3527 in 1873, most of which are now settling into work.

GOVERNMENT INSPECTION OF COAL AND METALLIFEROUS MINES.

Subjoined is a list of the districts in charge of the several Inspectors of Metalliferous Mines; and of the Inspectors of Coal Mines, with the assistant inspectors and secretaries of the Boards of Examination.

METALLIFEROUS MINES.

1.—Mr. CLEMENT LE NEVE FOSTER, D.Sc., Truro:—Cornwall, Devonshire, Somersetshire (except Bristol district), Wiltshire.

2.—Mr. T. F. EVANS, Amlwch, Anglesea:—Derbyshire, Shropshire, Cumberland, Lancashire, Durham and Northumberland, Westmoreland, Yorkshire (except Cleveland and Whitby district), North Wales, Cardiganshire, Radnorshire, Merionethshire, Carnarvonshire, Brecknockshire, Montgomeryshire, Denbighshire, Flintshire, Anglesea, Isle of Man.

3.—Mr. THOS. WYNNE, Stone:—Staffordshire.

4.—Mr. JOSEPH DICKINSON, Pendleton, Manchester:—Cheshire, Ireland.

5.—Mr. W. ALEXANDER, 23, India-street, Glasgow:—Scotland.

6.—Mr. T. E. WALES, Brunswick-place, Swansea:—Pembrokeshire, Carmarthenshire, Glamorganshire.

7.—Mr. LIONEL BROUGH, Clifton, Bristol:—Somersetshire (Bristol district), Gloucestershire, Herefordshire, Monmouthshire.

8.—Mr. THOS. EVANS, Duffield-road, Derby:—Oxfordshire, Northamptonshire.

9.—Mr. F. N. WARDELL, Wath, Rotherham:—Lincolnshire.

10.—Mr. JAMES WILLIS, Old Elvet, Durham:—Yorkshire (Cleveland and Whitby district).

COAL MINES.

(A.I., Assistant Inspector; SEC. B.E., Secretary to Board of Examination.)

1.—Mr. JAMES WILLIS, Newcastle-on Tyne; A.I., Mr. W. N. Atkinson, 10, Gloucester-terrace, Newcastle-on-Tyne; SEC. B.E., Mr. T. D. Forrest, 17, Rock-street, Shieldfield, Newcastle-on-Tyne:—Northumberland, Cumberland, and Durham north of the Wear.

2.—Mr. THOMAS BELL, Durham; A.I., Mr. J. B. Atkinson, Chilton Moor, Fence Houses; SEC. B.E., Mr. G. W. Bartlett, Cleveland-parade, Darlington:—Durham south of the River Wear in its course from the sea at Sunderland up as far as Harraton, near Chester-le Street, and from thence westward, the line of the Pontop and Shields branch of the North-Eastern Railway.

3.—Mr. FRANK N. WARDELL, Wath-on-Dearne, near Rotherham; A.I., Mr. John Gerrard, Westgate, Wakefield; SEC. B.E., Mr. J. R. Jeffery, solicitor, Bradford:—The West Riding of Yorkshire.

4.—Mr. THOS. EVANS, Pen-y-Bryn, Duffield-road, Derby; A.I., Mr. J. L. Dickinson, 19, Leopold-street, Derby; SEC. B.E., Mr. W. Saunders, 42, Full street, Derby—Derby, Nottingham, Warwickshire, and Leicester.

5.—Mr. THOS. WYNNE, Stone; A.I., Mr. T. Gray, Stone; SEC. B.E., Mr. Joseph Knight, Newcastle-under-Lyme:—North Staffordshire, Shropshire, and Cheshire.

6.—Mr. JAMES P. BAKER, Tattenhall, Wolverhampton; A.I., Mr. W. B. Scott, Compton-road, Wolverhampton; SEC. B.E., Mr. Wm. Blakemore, Heath Town, Wolverhampton:—South Staffordshire and Worcestershire.

7.—Mr. JOSEPH DICKINSON, Pendleton, Manchester; A.I., Mr. J. S. Martin, Park Villas, Bury New Road, Prestwich, Manchester; SEC. B.E., Mr. W. M. Peace, 19, King-street, Wigan:—North and East Lancashire, called the Manchester district, and Ireland.

8.—Mr. HENRY HALL, Liverpool; A.I. [not yet appointed]; SEC. B.E., Mr. W. M. Peace, 19, King-street, Wigan:—West Lancashire, the Wigan and St. Helen's districts, and North Wales.

9.—Mr. LIONEL BROUGH, 11, West Mall, Clifton, Bristol; A.I., Mr. Thos. Cadman, Newport, Monmouth; SEC. B.E., Mr. J. T. Thomas (care of), Mr. J. P. Baker, Albion Chambers, Bristol:—Monmouthshire, Gloucestershire, Somersetshire, and Devonshire.

10.—Mr. THOMAS E. WALES, Brunswick-place, Swansea; A.I., Mr. William Galloway, Swansea; SEC. B.E., Mr. C. H. James, 8, Courtland-terrace, Merthyr Tydfil:—South Wales coal field.

11.—Mr. RALPH MOORE, Croft Cottage, Rutherglen, Glasgow; A.I., Mr. J. T. Robson, Cambuslang, Glasgow; SEC. B.E., Mr. D. Wingate, Craigneuk by Motherwell, N.B.:—Scotland: Eastern Division, including East Lanarkshire, Fifeshire, Clackmannanshire, Haddingtonshire, Edinburghshire, Linlithgowshire, East Stirlingshire, &c.

12.—Mr. WM. ALEXANDER, 23, India-street, Glasgow; SEC. B.E., Mr. C. Macpherson, 116, St. Vincent-street, Glasgow;—Scotland: Western Division, including Ayr, Dumfries, Dumbarton, West Division of Stirling, and part of Lanarkshire.

CHEMICAL AND GEOLOGICAL ESSAYS.

Continuing the notice of Dr. STERRY HUNT'S interesting volume, it must be mentioned that the next essay deals with the "Chemistry of Natural Waters;" it is divided into three parts, in the first of which he explains the general principles which must form the basis of a correct chemical history of natural waters; whilst the second embraces a series of chemical analyses of mineral waters from the palæozoic rocks of the Champlain and St. Lawrence and Ottawa basins, together with some river waters; and the third consists chiefly of deductions and generalisations from these analyses. The following essay on "Petroleum, Asphalt, Pyroschists, and Coal." In this paper, which was read before the American Association for the Advancement of Science in 1870, there is given a summary of his conclusions on the geological history of petroleum. To it are appended extracts from an earlier paper in the "American Journal of Science," March, 1863, on "Bituminous and Pyroschists" and some later observations by Dawson and himself on the vegetable tissues forming coal. He submits that petroleum is indigenous to the limestones, and rejects the contrary opinion held by some geologists that its occurrence in them is due to infiltration. In an essay on "Granite and Granitic Veinstone," Dr. Hunt points out the destinction to be observed with reference to granites and syenites, and explains the different structure of gneiss and granite. The views of Scheerer, Virlet d'Aout, Elie de Beaumont, and other who have written upon the subject are discussed, and he mentions, Februry, 1871, that he had for several years taught that granitic veins even when made up of quartz, mica, felspar, tourmaline, garnet, and apatite, with cassseterite, wolfram, &c., are concretionary and of aqueous origin.

The "Origin of Metalliferous Deposits," which is the next essay reprinted, was a lecture to a general audience given before the American Institute of New York, in May, 1872. He maintained that the metals seem to have been originally brought to the surface in watery solutions, from which they have been separated by the reducing agency of organic matter in the form of sulphurets or in the native state, and mingled with the contemporaneous sediments where they occur in beds in disseminated veins forming fahlbands, or are the cementing material of conglomerates. During the subsequent metamorphism of the strata, these metallic matters being taken into solution by alkaline, carbonates, or sulphurets have been re deposited in fissures in the metalliferous strata forming veins, or ascending to higher beds, have given rise to metalliferous veins in strata which are not themselves metalliferous. Such is conceived to be, in a few words, the theory of metalic deposits; they belong to a period when the primeal sediments where yet impregnated with metallic compounds, which were soluble in the permeating waters. The metals of the sedimentary rocks are now, however, for the greater part in the form of insoluble sulphurets, so that we have only traces of them in a few mineral springs, which serve to show the agencies once at work in the sediments and waters of the earth's crust. The present occurrence of these metals in waters which are alkaline from the presence of carbonates of soda is of great significance when taken in connection with the metalliferous character of certain dolomites which probably owe their origin to the action of similar alkaline springs upon basins of sea water. The intervention of intense heat sublimation and similar hypothesis to explain the origin of metallic ores are considered to be uncalled for. The solvent power of solutions of alkaline carbonates, chlorides, and sulphurets at elevated temperatures taken in connection with the notions above enunciated, and with De Senarmont's and Daubree's beautiful experiments on the crystallisation of certain mineral species in the moist way, will suffice to form the basis of a satisfactory theory of metallic deposits.

The next essay is on the "Geognosy of the Appalachians, and the Origin of Crystalline Rocks;" it is the address which Dr. Hunt delivered on retiring from the office of President of the American Association for the Advancement of Science, in August, 1871. He rejects for many mineral silicates the view that they are pseudomorphs—crystals chemically altered without loss of external form; he denies that crystals of serpentine having the shape of chrysolite, pyroxene, dolomites, &c., and crystals of pinite having the shapes of nepheline and scapolite are the results of a chemical change of these species, notwithstanding this view was then held by most mineralogists on the ground of similarities of geometrical form, and the existence of what are regarded as intermediate stages in the process of transmutation; and he has maintained another and very different view, which appears more rational. He successfully opposed—and in this he certainly has the support of Scheerer, Delesse, and others—the then popular doctrine of epigenesis. The diagenetic doctrine was first put forward by Dr. Hunt in a paper on "Some Points of Chemical Geology," read before the Geological Society of London, in January, 1859. He there maintained that serpentines were "undoubtedly indigenous rocks, resulting from the alteration of silico-magnesian sediments," and, moreover, asserted that the final result of heat, aided by water, on such rocks would be their softening and in certain cases their extravasation as plutonic rocks, which were regarded "as, in all cases, altered and displaced sediments." When this paper was written Dr. Hunt still supposed that the reactions between the elements in beds of silicious magnesian carbonates (which he had shown) may give rise to certain magnesian silicates in immediate proximity to eruptive rocks might serve to explain the origin of great areas of serpentine and related crystalline magnesian silicates; but his studies of the silicates deposited during the evaporation of natural waters, and of the magnesian sediments of the Paris basin, soon led him to seek the origin of these rocks in the alteration of previously formed uncrystalline magnesian silicates. This view Dr. Hunt published in the "American Journal of Science" for March, 1860. That Prof. Dana has much misrepresented Dr. Hunt is beyond question, but this has probably arisen from Dana's peculiar chemical notions. Dr. Hunt says that he, in common with all other chemists, rejects the chemical speculations which lie at the base of Prof. Dana's views.

The remaining essays on the "Geology of the Alps," on the "History of the names Cambrian and Silurian in Geology," on the "Theory of Chemical Changes and Equivalent Volumes" (published in 1858) on the "Construction and Equivalent Volume of Mineral Species" (1853-63), "Thoughts on Solution and the Chemical Process (1854), on the "Objects and Method of Mineralogy" (1867), and on the "Theory of Types in Chemistry" are all equally interesting, and are amply sufficient to establish Dr. Hunt's claim to priority in discovering and announcing many of the most important hypothesis connected with the branches of science to which his researches have been directed, and which, although opposed when first put forward, are gradually becoming generally recognised as the only hypothesis which are tenable.

VAN MINES—MONTHLY REPORT.

WILLIAM WILLIAMS, FEB. 10.—As under is my monthly report for this mine. At the 90 cross-cut we have driven 9 ft. into the lode, and so far have found it well charged with lead and blende. Our progress continues slow here, owing to the water, and it will be so until we have drained the lode to this level. The lode in the present end of the 75, west of shaft, is worth 40*l.* per cubic fathom. We are crossing through the lode at the end of the 75 east, and find it to be intermixed throughout with lead and blende. The 60, west of shaft, is now worth 40*l.* per cubic fathom for lead ore. The same level, driving east from the 90 fathom cross-cut, is worth 80*l.* per cubic fathom. We are also driving the 60 in the soft, west of the 90 cross-cut, and have driven during the past month 6 fms. The stripping of the lode to full width, westward from the said 90 cross-cut, is worth 40*l.* per cubic fathom. The stopes in the back of the 60, 10 in number, are worth on the average 22*l.* per cubic fathom for lead ore; average width of lode 15 ft. The winze sinking below the 60, at a point 35 fms. west of shaft, is down 10 fms. 3 ft. The lode here is now worth 32*l.* per cubic fathom. No change to report from the 45 west. The winze sinking below the 45, at a point 115 fms. west of shaft, is down 7½ fms. by the side of the lode. The stopes in the back of this level, 16 in number, east and west of shaft, are worth on an average 26*l.* Mean width 18 ft. We are still pushing forward the cross-cut north at the end of the 30, under Edwards's shaft. There is a strong stream of water issuing from the end, but as yet we have seen no lead worth valuing. The 24 stope, in the back of the 30, east of shaft, is worth 21*l.* per cubic fathom. The two stopes in the back of the 15, east of shaft, are worth 12*l.* per cubic fathom. Average width 16 ft.—Surface: We are making good progress in the alterations upon our dressing-floors. We are also getting on very well with the embankment of the new reservoir. Our sale upon 800 tons of lead ore takes place to-morrow.

GREAT EAST FOXDALE (SILVER-LEAD) MINING COMPANY.

QUARTERLY REPORT, FEB. 5.—Since my last report the engine-shaft has been started below the 68 fm. level for another cross-cut, and fair progress has been made, the shaft being already 5 fms. towards the 83, at which depth the new level will be made. The 68 west has been driven 7 fathoms on a very kindly looking lode, at times producing pieces of ore, though as yet of no value. The 68 east has been driven 10 fathoms; in this level we have had a continuous rib of ore, worth 15 cwts. per fathom, the present end being as productive as any part yet gone through. This speaks well for the 83, where we may expect to cut a very valuable lode. The stope in the roofs of the 53 still continues about the same, and although rather short it yields good ore. In the 40 east there is no improvement as yet. We are at present clearing out and reparing the old incline shaft between the 40 and 53 for ventilation, and also to serve as a footway. At surface we have erected sheds over the dressing-floors, and everything in connection therewith is in good order, and working well. There is already 10 tons of clean ore in the store-house. The engine, pitwork, &c., are all in good repair, and working satisfactorily. In conclusion, I must say that the prospects of the mine never were better, or more encouraging than at present.—EDWARD BAWDEN, jun.

MINERALOGY.—Prof. G. J. Brush's long expected Supplement to Dana's Descriptive Mineralogy has just been published in New York, and forms a complete manual of determinative mineralogy, with an introduction to blow-pipe analysis. The price is $3, and it can be obtained through Messrs. Trübner, of Ludgate Hill. The first portion of the work is devoted to a "Systematic Course of Qualitative Blow-pipe Analysis," mostly arranged from Berzelius and Plattner, and forms an ample preparation for the study of the second part on Determinative Mineralogy. This portion consists of tabular classifications of minerals according to the chemical reactions obtained by the wet and by the dry way.

REGENERATOR FURNACES.—The invention of Mr. M. FOSTER, of Alleghany city, Pennsylvania, relates more particularly to regenerators wherein the products of combustion pass continuously through tubes, against the outer surface of which the air and gas to be heated pass; and consists, firstly, in providing a reticulated barrier or checkwork between the regenerator and the down-take or flue leading from the hearth, for the purpose of absorbing a portion of the heat from the products of combustion before entering the regenerator; secondly, in making the apertures in such barrier increase in number or size in the line of retreat of the flame; thirdly, in providing stoppered air holes opposite the barrier for the admission of air, in order to reduce the temperature of the products of combustion: and, fourthly, in applying such stoppered apertures for the admission of air to regenerator furnaces that are not provided with the before mentioned barrier.

ARTIFICIAL FUEL.—The invention of Mr. H. T. CLUBLEY, of Sheffield, which is applicable amongst other things to the manufacture of blocks of artificial fuel consists, firstly, in the employment of two or more rollers of unequal diameters, and which are made by suitable gearing to revolve at one speed, thus giving an unequal speed on the face of the rolls, whereby more effectually producing a crushing and rending of the substances as they pass from the hopper. Secondly, in the arrangement of a movable slide or slides, in which are fixed the dies or moulds for holding the clay or other substance, and which is made to slide in a vertical direction to the ordinary ram which compresses the same; the motion to the slide which carries the dies is imparted by a horizontal reciprocating eccentric slide in such manner that requisite time is allowed as it moves for the charging or filling of the die or dies in the vertical slide; the compressing of the same by the ordinary compressing ram or lever, and also for pushing of the brick or bricks or other articles from the dies or moulds onto the table for receiving them after compression. Thirdly, the combination with or attachment of a pusher for pushing the bricks or other articles from the dies or moulds with or to the aforesaid reciprocating eccentric horizontal slide. Fourthly, in the construction and arrangement of a second compressing appliance or motion to act on the top or bottom sides or both of the bricks or other articles simultaneously with the action of the compressing lever before described.

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Forms of tender, containing all particulars, may be obtained on personal or written application to this office.

FRANCIS W. ROWSELL, Superintendent of Contracts.

THE LOVELL MINE, WENDRON, CORNWALL.

NOTICE IS HEREBY GIVEN, that Mr. HENRY CHAPMAN has ceased to be the London Manager of this company, and Mr. ALFRED LAWRENCE has ceased to be the Secretary of the company, and that Mr. GRANVILLE SHARP has been appointed SECRETARY of the company; and that the OFFICE of the company has been REMOVED from No. 1, Chiswell-street to 2, GRESHAM BUILDINGS, BASINGHALL STREET.

All money due to the company must (until a banking account is opened) be paid to the Secretary. All persons having claims against the company are requested to furnish particulars of same to the Secretary.

4th February, 1875.

TO MANUFACTURERS, PATENTEES, AND CAPITALISTS.

EXTENSIVE ROOMS AND PREMISES, with RESIDENCE, near a large COLLIERY, IRON WORKS, and RAILWAY, suitable for a MANUFACTORY or BREWERY. Steam power and warming apparatus fixed. TO BE LET, OR SOLD.

Apply to Messrs. OLIVER, NEWBOLD, and OLIVER, Auctioneers, Derby.

FOR SALE, BY PRIVATE BARGAIN, the WHOLE LEASES, STEAM ENGINE, WATER WHEEL, PLANT, MACHINERY, STOCK and EFFECTS, belonging to

THE GALWAY MINING COMPANY (LIMITED),

Of and on the various ESTATES held on Mineral Lease by the company, near OUGHTERARD, in the county of GALWAY.

Apply to Capt. FLOYD, Wellfield, Oughterard, who will show the ground and give explanations as to workings; or to the Subscriber as to the Assignment of Leases, and for all other particulars. J. H. M. BAIRNSFATHER.

Hamilton, N.B., 8th February, 1875.

FOR SALE, in Dean Forest, a VALUABLE COLLIERY, containing THREE HUNDRED AND FIFTY-ONE ACRES in FOUR SEAMS of COAL.

Particulars, &c., may be had of Messrs. ATKINSON and VAUGHAN, Mining Engineers, Coleford, Gloucestershire; and M. W. T. SCOTT, Esq., M.E., 4, Westminster Chambers, Victoria-street, London.

TO BLUESTONE AND SULPHURIC ACID MANUFACTURERS, COPPER SMELTERS, OR CAPITALISTS.

FOR SALE, OR TO LEASE, the LEVIATHAN COPPER AND SULPHUR MINES, ALPINE COUNTY, CALIFORNIA. The ore, which is in the form of silicate, black and red oxide, grey sulphide, with finely disseminated metallic copper, averages from 15 per cent. to 50 per cent. copper. A few parcels taken out during exploratory operations realised for bluestone manufacture about $30,000.

The amount of ore in sight has been estimated variously from 1500 to 2000 tons, 20 per cent. copper. On dump 300 tons, 15 per cent. Supply practically inexhaustible. Title perfect. Present minimum capacity 10 tons per day, which may be extended indefinitely; cost of mining, $2 per ton. There is also a stratum of sandstone 20 ft. thick, impregnated with 26 per cent. pure sulphur To a cash purchaser highly advantageous terms will be offered.

Reference to Prof. Raymond's report to the United States Government on the mineral resources of the Pacific States for 1873, page 15, of all particulars.

Further particulars can be obtained from W. T. RICKARD, F.C.S., 25, Finsbury-place; C. CHALMERS, Esq., Palmerston Buildings, Old Broad-street, City, London; or to LEWIS CHALMERS, Esq., Silver Mountain, Alpine County, California.

FINE OPPORTUNITY FOR MAKING A FORTUNE.

TO BE SOLD, PART or ENTIRE (former preferred) of a COLLIERY ROYALTY, of about 170 acres, in NORTH WALES. The pit is sunk 40 yards deep to the seam containing the best description of Cannel. There are six other seams of good coal (the first being King Coal, only 14 yards under it) known to be beneath this seam. Its situation being half a mile from a railway station, and also admirably adapted for land sale, close to excellent roads, the working expenses, royalty, rent, and outlay small for a probable get in a few weeks of 40 tons daily at an almost fabulous profit, render the present undertaking one well worthy the immediate attention of capitalists, coal dealers, gas manufacturers, or colliery proprietors.

Address, "Q. E. D.," care of Mr. Watson, 15, Fenwick-street, Liverpool.

FOR SALE, a HORIZONTAL HIGH-PRESSURE ENGINE, 13½ in. cylinder, 24 in. stroke; HORIZONTAL HIGH-PRESSURE ENGINE, 14 in. cylinder, 30 in. stroke; and a PAIR of GUN-METAL PUMPS, 6 in. diameter, 12 in. stroke; also, a TUBULAR BOILER, up to 60-horse power, of Yorkshire plates throughout.

Apply to W. T. HENDRY and Co., 2, Wilson-street, London E.C.

MINING MACHINERY AND MATERIALS FOR SALE, comprising STEAM ENGINES, WATER WHEELS, PITWORK, and other MINE MATERIAL.—Apply to—

W TREGAY REDRUTH

THE TAVISTOCK IRONWORKS, ENGINEWORKS, FOUNDRY, AND HAMMER MILLS,

TAVISTOCK, DEVON.

NICHOLLS MATHEWS, AND CO.

ENGINEERS, BRASS AND IRON FOUNDERS,
BOILER MAKERS AND SMITHS.

MAKERS OF

CORNISH PUMPING, WINDING, AND STAMPING ENGINES; STEAM CAPSTANS AND CRUSHERS; WATER-WHEELS; PUMP-WORK; SHOVELS, AND HAMMERED IRON FORGINGS OF EVERY DESCRIPTION.

Also of SPUR, MORTICE, MITRE, BEVIL, and other WHEELS, of any diameter up to 12 feet, made by Scott's Patent Moulding Machine, without the aid of patterns, and with an accuracy unattainable by any other means.

MACHINERY of FOREIGN MINES carefully prepared.

SECONDHAND MINING MACHINERY, in good conditon, always on sale at moderate prices.

IMPORTANT.

TO MINE AGENTS AND MINING ENGINEERS.

MESSRS. BERKELEY AND CO. have INVENTED a NEW DESCRIPTION of STENCIL PLATE for LETTERING PLANS, which will enable any person to produce in an instant all kinds of Lettering, North Points, Trees, Borders, Scales, &c., upon Drawings, equal to the finest hand-work. These plates not only supersede all others ever introduced, but are supplied at less than one-third the cost. Illustrated Sheets of New Designs forwarded gratis on application to— R. R. BERKELEY AND CO.,

WELLINGTON HOUSE, BRENTFORD ROAD, CHISWICK, LONDON.

RAILWAY CARRIAGE COMPANY (LIMITED).—
ESTABLISHED 1847.

OLDBURY WORKS, NEAR BIRMINGHAM.

MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION of IRONWORK.

Passenger carriages and wagons built, either for cash or for payment, over a period of years.

RAILWAY WAGONS FOR HIRE.

CHIEF OFFICES,—OLDBURY WORKS, NEAR BIRMINGHAM.

LONDON OFFICES,—7, GREAT WINCHESTER STREET BUILDINGS.

THE BIRMINGHAM WAGON COMPANY (LIMITED) MANUFACTURE RAILWAY WAGONS of EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.

EDMUND FOWLER, Sec.

WAGON WORKS,—SMETHWICK, BIRMINGHAM.

*** Loans received on Debenture; particulars on application.

Edition of 1874.—Just issued, large 8vo., pp. 724, cloth, 8s., post free, or bound in half morocco, 10s. 6d.

THE HOMŒOPATHIC DOMESTIC PHYSICIAN.

By DRS. PULTE and EPPS,

Revised, with important editions, and many new remedies, by WASHINGTON EPPS, L.R.C.P., M.R.C.S.

TABLE OF CONTENTS:—General Diseases—Casual Diseases—Cutaneous Diseases—Fevers—Affections of the Mind—the Head—the Eyes—the Ears—the Nose—the Face, Lips, and Jaws—the Teeth, Gums, and Mouth—the Windpipe and Chest—the Stomach and Bowels—the Urinary and Genital Organs—Diseases of Women—Treatment of Children—Anatomy and Physiology—Hygiene and Hydropathy—Materia Medica—Domestic Surgery—Medical and Surgical Appliances—Dislocations and Luxations—Fractures—Glossary—Index.

A Chest of Medicines, book enclosed, £3 10s. or £5 5s.

JAMES EPPS and Co., 45, Threadneedle-street; and 170, Piccadilly.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the MORVAH CONSOLS TIN MINING COMPANY (LIMITED).—The Vice-Warden has, by an Order made in the above Matter, bearing date the 6th day of February instant, appointed CHARLES WILLIAM CLINTON, of Truro, within the said Stannaries, an Officer of the said Court, to be absolutely the Official Liquidator of the above-named company.

FREDERICK MARSHALL, Registrar.

Dated Registrar's Office, Truro, February 8th, 1875.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the MORVAH CONSOLS TIN MINING COMPANY (LIMITED).—Notice is hereby given, that ALL CREDITORS of the above-named company are required, on or before the 20th day of February instant, TO SEND in their NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of their several CLAIMS, to CHARLES WILLIAM CLINTON, the Official Liquidator of the said company, at the Stannaries Court Office, in Truro.

FREDERICK MARSHALL, Registrar.

Dated Registrar's Office, Truro, February 8th, 1875.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the TRELEIGH WOOD UNITED MINING COMPANY.—The Vice-Warden has, by an Order made in the above Matter, bearing date the 6th day of February instant, appointed JOHN HENRY HAMLEY, of Truro, within the said Stannaries, an Officer of the said Court, to be absolutely Official Liquidator of the above-named company. FREDERICK MARSHALL, Registrar.

Dated Registrar's Office, Truro, February 8th, 1875.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the TRELEIGH WOOD UNITED MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the above named company are required, on or before the 20th day of February instant, TO SEND IN their NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of their several CLAIMS, to JOHN HENRY HAMLEY, the Official Liquidator of the said company, at the Stannaries Court Office, in Truro. FREDERICK MARSHALL, Registrar.

Dated Registrar's Office, Truro, February 8th, 1875.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the LEEDS TIN MINE COMPANY.—ALL CREDITORS or CLAIMANTS of the above-named company, who have not received notice from the Official Liquidator thereof that their claims have been already admitted, are hereby required to COME IN and PROVE THEIR SEVERAL DEBTS or CLAIMS at the Registrar's Office, Truro, on Saturday, the 20th day of February instant, at Eleven o'clock in the forenoon; or, in default thereof, they will be EXCLUDED from the BENEFIT of any DISTRIBUTION made before such proof. And for the purpose of such proof they are to attend in person, or by their solicitors or competent agents, at the time and place above mentioned.

FREDERICK MARSHALL, Registrar.

Dated Registrar's Office, Truro, the 8th day of February, 1875.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the LEEDS AND ST. AUBYN MINING COMPANY.—ALL CREDITORS or CLAIMANTS of the above-named company, who have not received notice from the Official Liquidator thereof that their claims have been already admitted, are hereby required to COME IN and PROVE THEIR SEVERAL DEBTS or CLAIMS at the Registrar's Office, Truro, on Monday, the 22nd day of February instant, at Eleven o'clock in the forenoon; or, in default thereof, they will be EXCLUDED from the BENEFIT of any DISTRIBUTION made before such proof. And for the purpose of such proof they are to attend in person, or by their solicitors or competent agents, at the time and place above mentioned.

FREDERICK MARSHALL, Registrar.

Dated Registrar's Office, Truro, the 9th day of February, 1875.

In Chancery.

POTTON v. MARRIOTT—PHILLIPS v. MARRIOTT.

Nearly NINE ACRES of FREEHOLD LAND with COAL under the same, situate at BAGILLT, in the neighbourhood of FLINT, HOLYWELL, and within easy distance of RHYL and CHESTER.

TO BE SOLD, pursuant to a Decree of the High Court of Chancery made in the above causes, with the approbation of the Vice-Chancellor, Sir JAMES BACON, in Two Lots, BY MR. HENRY EDWARD MURRELL, the person appointed by the said Judge, at the Grosvenor Hotel, Chester, on Wednesday, the 10th day of March, 1875, at Two for Three o'clock in the afternoon, certain FREEHOLD LAND and BUILDINGS, with the COAL under the same (a small portion of which has been worked), known as the ALLSUP LAND, adjoining the WERN COLLIERY, situate at Bagillt, in the parish of Holywell, in the county of Flint, comprising a SURFACE AREA of nearly NINE ACRES, late the property of George Allsup, deceased, particulars whereof may be had gratis of Messrs. BLAKE and SNOW, Solicitors, 22, College Hill, Cannon-street, London; Mr. JOHN LETTS, Solicitor, No. 8, Bartlett's Buildings, Holborn, London; Messrs. WILLIAMSON and HILL, Solicitors, John-street, Bedford-row, Middlesex; Mr. JOHN HENRY LAW, Solicitor, of the Cathedral Gates, Manchester; Mr. J. M. GREEN, Solicitor, Queen-street, Cheapside, London; at the place of sale; the Royal Oak, Flint; the Hen and Chickens, Birmingham; the Royal Hotel, Rhyl; the Railway Inn, Bagillt; and of Mr. MURRELL, the Auctioneer, 1, Walbrook, London.

TO BE SOLD, pursuant to a Decree of the High Court of Chancery, made in a Cause MARRACK against BAKER, 1872, M. 175, with the approbation of the Master of the Rolls, in Forty Lots, by WILLIAM JAMES JOHNS, the person appointed by the said Judge, at the Cornubia Hotel, Copperhouse, Hayle, in the county of Cornwall, on Tuesday, the 16th day of February, 1875, at Two o'clock in the afternoon precisely, the ENGINE WORKS, BRASS and IRON FOUNDRIES, HAMMER MILLS, and PREMISES, constituting

THE COPPERHOUSE FOUNDRY,

Situate at Copperhouse, in the town and port of Hayle, in the county of Cornwall, which has been carried on for upwards of fifty years by the Cornish Copper Company, under the style of Sandys, Vivian, and Company.

Together with the SHIPBUILDING YARD, ROPERY, GAS WORKS carried on in connection with the above business, and about 140 DWELLING HOUSES and COTTAGES, to most of which gardens are annexed; FARMSTEAD and other BUILDINGS—the whole forming a large part of the ESTATES of TREVASSACK and VENTONLEAGUE, containing together nearly FORTY ACRES, 47-60ths of which are held for the residue of a term of 999 years, of which about 904 are unexpired, at a peppercorn rent, with the benefit of a covenant to convey the reversion in fee, and the remaining 13-60ths are held in fee.

This property is situate at the head of the harbour of Hayle, and in the midst of the Cornish mining district, and possesses all the requirements and conveniences for carrying on the above businesses, either as a whole or separately, besides being adapted for carrying on any other extensive mercantile business, such as tin, iron, or copper smelting.

There is a dock and also wharves immediately abutting on the property, to the use of which the company have rights for the purpose of landing or exporting goods at nominal dues.

Facilities also exist for railway transit by the West Cornwall Railway, which runs through the property, and into which provisions have been made for carrying a siding from the company's works.

Printed particulars and conditions of sale, with plan annexed, may be had (gratis) in London of the following solicitors—Messrs. GREGORY, ROWCLIFFES, and RAWLE, 1, Bedford-row; Messrs. BENNETT, DAWSON, and BENNETT, New-square, Lincoln's Inn; Mr. R. SMITH, 7, New-square, Lincoln's Inn; Messrs. DANGERFIELD and FRASER, 26, Craven-street, Strand—and in the country of Messrs. STEPHENS, PRANCE, and JAGO, Plymouth; Messrs. RODD and CORNISH, Penzance; Messrs. CARLYON and PAULL, and Messrs. HODGE, HOCKIN, and MARRACK, Truro; and at the principal hotels at Truro and neighbouring towns of the Auctioneer; and at the place of sale.

JOHN WM. HAWKINS, Chief Clerk.

Dated this 19th day of January, 1875.

LANARKSHIRE.

MINERAL ESTATE OF REDHOUSE, BY BATHGATE, FOR SALE.

UPSET PRICE, £15,000.

THIS VALUABLE MINERAL ESTATE will be EXPOSED to SALE BY PUBLIC ROUP, within Dowell's Sale Rooms, Edinburgh, on Wednesday, 17th March next, at Two o'clock. To ensure competition the low upset price of £15,000 has been decided upon. Purchaser's entry and price payable on 15th May, 1875.

For detailed particulars, and reports, and analyses of Minerals, apply to ROBERT WEBSTER, Esq., Redhouse, Blackburn, by Bathgate; J. W. BARTY, Esq., Solicitor, Dunblane; or to W. G. ROY, S.S.C., Edinburgh, in whose hands are the Title-Deeds and Articles of Roup.

CORNISH ENGINES.

FOR SALE:—

ONE excellent 70 in. CORNISH PUMPING ENGINE, 10 ft. stroke, with metallic piston, with or without three boilers, 13 tons each, with fittings.

ONE good 72 in. CORNISH BEAM ENGINE, 10 ft. stroke, with inverted cylinder.

ONE superior 50 in. CORNISH PUMPING ENGINE, 10 ft. stroke.

ONE first-class 28 in. WINDING ENGINE, 6 ft. stroke, suitable for a colliery, with drum.

ONE very good 20 in. horizontal WINDING ENGINE, 10 ft. stroke.

PUMPWORK of all sizes; CORNISH CRUSHERS; BOILERS from 6 to 12 tons; and a LARGE STOCK of MATERIALS in general use in mines.

Apply to F. W. MICHELL and Co., Mine Material Depôt, East Carn Brea, Redruth, Cornwall.

SALE ON FRIDAY NEXT.

PERIODICAL SALES OF REVERSIONS, LIFE INTERESTS, POLICIES, SHARES, &c.

MESSRS. FRANK LEWIS AND KEMP will include in their next Periodical Sale, which takes place at the Mart, Tokenhouse-yard, E.C., on Friday, February 19th, at Two o'clock, the

MINING CONCESSIONS

To the following very VALUABLE ZINC MINING PROPERTIES, situated on the "Vicos de Europa," Santander, Spain, comprising the mines "Constancia," "Desengano," "Leonado I.," "Leonado II.," and "Incredible," the whole having a superficial area of 395,000 square metres, together with DWELLING HOUSE, COTTAGES, STABLES, &c., and 20 acres of good FREEHOLD LAND.

There is a capital road to the mines, and the port is within easy distance. The mineral, labour, and fuel are abundant. Held direct from the Spanish Government free of all royalties.

Also the valuable "Sancho Panza" Zinc Mine, situated near the village of Cabanyon, Herruas, Santander, Spain, having a superficial area of about 120,000 square metres.

Detailed particulars and conditions of sale may be had of Messrs. FRANK LEWIS and KEMP, Auctioneers and Surveyors, 26, Gresham-street, E.C.

WHEAL MARY ANN MINE,

Near Liskeard, one mile from Menheniot Station on the Cornwall Railway.

SALE—TUESDAY, WEDNESDAY, and THURSDAY, 23rd, 24th, and 25th February, 1875.

MR. SPRY has received instructions to SELL, BY PUBLIC AUCTION, on the days above mentioned, at Twelve o'clock (noon) precisely, on WHEAL MARY ANN and TRELAWNY MINES, situate in the parish of Menheniot, in the county of CORNWALL, nearly 1000 lots of very superior

MINING PLANT, MACHINERY, AND MATERIALS,

COMPRISING

ONE 80 inch cylinder PUMPING ENGINE, 10 ft. 6 in. stroke, equal beam, with FOUR 10 ton BOILERS, brass bucket, brass-lined well-work, &c. It is considered that this lot cannot be excelled by any similar engine in the county.

ONE 70 inch cylinder PUMPING ENGINE, 10 ft. stroke, equal beam, with FOUR 10 ton BOILERS, &c.

ONE 45 inch cylinder BULL ENGINE, 7 feet stroke, equal beam, with new well-work, brass bucket, &c.

ONE 26 inch cylinder WINDING ENGINE, 7 ft. stroke, equal beam, with ONE 8 ton BOILER, eccentric gear, and winch.

ONE 24 inch cylinder WINDING ENGINE, 6 ft. stroke, equal beam, with TWO 9 ton BOILERS, and winch.

ONE 22 inch cylinder ENGINE, 5 ft. stroke, equal beam, with ONE 8 ton BOILER, winch, grinder and stamps (12 heads).

ONE 22 inch cylinder HORIZONTAL WINDING ENGINE, 5 ft. stroke, with ONE 8 ton BOILER.

The CASTINGS of an ENGINE.

Capstan, stand, and stays. Shears, stays, and pulleys.

PITWORK of every description—an immense quantity, from 9 to 15 in.

Plunger poles of various sizes, cast-iron balance and angle bobs, three water-wheels, steam capstan, punching machine, fire whim cage, weighbridge (9 tons), strapping plates from 5 to 7 inches, staples and glands, flange and rod pins, large and small pulleys, side screws, brass valves and seatings, brass plate for bucket.

200 fms. best steel wire rope, 3½ inches, good as new.

195 fms. ⅝ in. chain.

Ladders, bridge rails, rail iron, tram wagons, tram wheels, large bell, turning lathe (back gear), large beam scales and weights, several large and small wood sheds and cisterns.

A vast quantity of brass, steel, cast and wrought iron.

Prime half and square timber, plank, &c., &c.

The best machinery and materials having been invariably purchased for these mines, and many of the lots having had very little wear, it is respectfully intimated to Engineers, Mine Proprietors, and Agents, who require to purchase, that it will be to their advantage to attend this important sale.

The engines will be offered on the first day of sale, and the pitwork, &c., &c., immediately afterwards, and on the subsequent days.

Intending purchasers are invited to luncheon in the counting-house on Wheal Mary Ann Mine, each day, at Eleven o'clock in the forenoon.

Further particulars are contained in descriptive catalogues, which can be obtained of Mr. W. G. NETTLE, the Purser, Liskeard; or of the Auctioneer, Liskeard.

Dated January 30, 1875.

TO CAPITALISTS.

FOR SALE,—IN NEW SOUTH WALES,—

1340 ACRES TIN LANDS,—Lode and Stream.
2430 ACRES COPPER LANDS (portions freehold).
2112 ACRES IRON AND COAL.
2250 ACRES COAL (on sea coast).
4000 ACRES COAL (inland, on railway line).
200 ACRES KEROSENE SHALE.
200 ACRES PLUMBAGO.
105 ACRES FREEHOLD GOLD DEPOSIT (Brown's Creek).

The above properties are all first-class, and on or near railway lines or water carriage, and are the very "pick" of their respective districts (being some of the first selections made).

Liberal terms, either as to purchase or working on royalty, will be given to parties able to carry out arrangements.

Apply to the owner,—

CHARLES W. WEEKES, Circular Quay, Sydney, N.S.W.

PIT SINKING AND WINDING COAL.

FOR SALE, and ready for immediate delivery, a 14, 18, 25, and 35 horse power PORTABLE STEAM ENGINES, with link motion reversing gear, winding drum, gear, &c., complete.

Also, a 9 and 18 horse power VERTICAL ENGINES, with link motion reversing gear, suitable for mining operations.

FOR SALE,—An excellent PORTABLE STEAM ENGINE; and a 7-ft. PAN MORTAR MILL. Apply to—

BARROWS AND STEWART, ENGINEERS, BANBURY.

TANK LOCOMOTIVES, double 9 in., cheap, strong, and well finished: portable ENGINES, from 4 to 30 horse power—always ready, or in a forward state, with or without winding or pumping gear; vertical ENGINES and BOILERS, of improved design.

Apply to— LEWIN, POOLE WORKS, DORSET.

ON SALE, CAPITAL STEAM FORCING ENGINE, capable of raising 440 gallons of water 140 yards vertical height per minute.

Apply to the BROUGHTON COAL COMPANY, near Wrexham.

ON SALE, TWO CORNISH BOILERS, 30 ft. by 7 ft. diameter. Two flues through each. Safe at 60 lbs. pressure working.

Apply to HENRY PARKINSON, Foundry-street, Bolton.

ON SALE, ONE PAIR of 18 in. high pressure HORIZONTA ENGINES, for winding, fitted with slot link motion. First-class pair o engines.

Apply to HENRY PARKINSON, Foundry street, Bolton.

ON SALE, ONE PAIR of 15 in. HORIZONTAL WINDING ENGINES, with slot link motion. Will be sold cheap.

Apply to HENRY PARKINSON, Foundry-street, Bolton.

ON SALE, ONE 25-horse power double cylinder PORTABLE ENGINE, fitted with slot link motion for winding.

ONE 20-horse power double cylinder PORTABLE ENGINE.

Will be sold cheap, and are in first-class order.

Apply to HENRY PARKINSON, Foundry-street Boiler Works, Bolton, Lancashire.

ON SALE, ONE 8-horse power PORTABLE ENGINE, fitted up with winding drum; slot link motion; made by Clayton and Shuttleworth. Price £130.

Apply to HENRY PARKINSON, Foundry-street, Bolton.

ON SALE, ONE PAIR of 25-in. coupled HORIZONTAL WINDING ENGINES, with drums and brake gear. Also, ONE PAIR of 22 in. ditto. Will be sold cheap.

Apply to HENRY PARKINSON, Foundry-street, Bolton.

ON SALE, ONE STRONG WELL-BUILT CONDENSING BEAM ENGINE, by a first-class maker, equal to new; cylinder, 36 in. bore, 5 ft. stroke. Can be seen standing, and will be sold cheap.

ONE close built self-contained CONDENSING BEAM ENGINE, stands on independent bed on six columns; cylinder, 28 in. bore, 4 ft. stroke. As good as new. Can be seen standing, and will be sold cheap.

Apply to HENRY PARKINSON, Foundry street, Bolton.

BOILERS ON SALE.—FOUR GALLOWAY'S PATENT BOILERS, 30 ft. by 7 ft., safe to work at 70 lbs. on the square inch.

TWO BOILERS, 28 ft. by 7 ft., with two flues through.
TWO BOILERS, 26 ft. by 7 ft., two flues through.
ONE BOILER, 20 ft. by 7 ft., two flues through.
ONE BOILER, 18 ft. by 6 ft. one flue through. Also, several smaller sizes.

Apply to HENRY PARKINSON, Foundry-street, Bolton.

ON SALE, ONE 16 horse power double cylinder PORTABLE ENGINE, for winding.

ONE 12-horse power PORTABLE ENGINE.
ONE 10-horse power PORTABLE ENGINE.
ONE 8 horse power PORTABLE ENGINE.
ONE 6-horse power PORTABLE ENGINE.

Equal to new, and will be sold cheap.

Apply to HENRY PARKINSON, Foundry-street, Bolton.

ON SALE, ONE PAIR of 25-in. HORIZONTAL WINDING ENGINES.

ONE PAIR of 18 in. HORIZONTAL WINDING ENGINES.
ONE PAIR of 16 in. HORIZONTAL WINDING ENGINES.
ONE PAIR of 15 in. HORIZONTAL WINDING ENGINES.
ONE PAIR of 12 in. HORIZONTAL WINDING ENGINES.
ONE PAIR of 10 in. HORIZONTAL WINDING ENGINES.
ONE PAIR of 7 in. HORIZONTAL WINDING ENGINES.

The above engines are now ready for delivery, and fitted with winding drums and brake gear to each pair of engines.

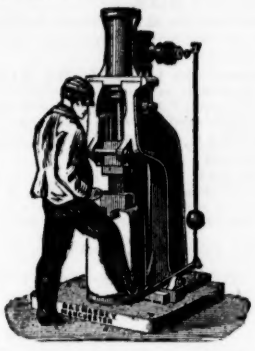
Apply to HENRY PARKINSON, Foundry-street, Bolton.

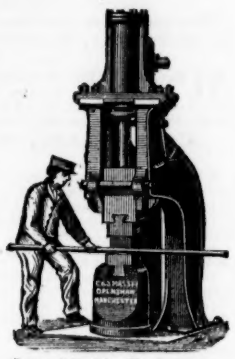
B. & S. MASSEY, OPENSHAW, MANCHESTER.

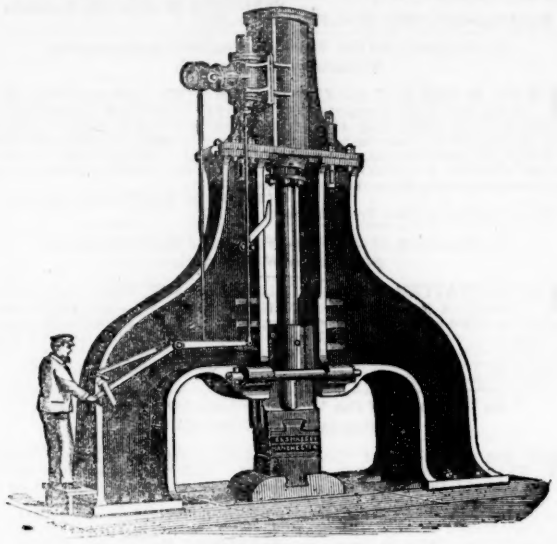
PRIZE MEDALS AWARDED:—Paris, 1867 Havre, 1868; Highland Society, 1870; Liverpool, 1871; Moscow, 1872; Vienna, 1873.

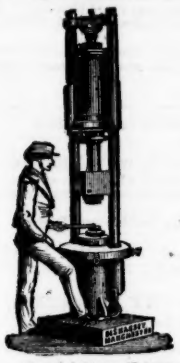
Patentees and Makers of **Double** and **Single-acting STEAM HAMMERS** of all sizes, from ½ **cwt.** to **20 tons,** with self-acting or hand motions, in either case giving a perfectly **DEAD BLOW,** while the former may be worked by hand when desired. **Large Hammers,** with **Improved Framing,** in **Cast** or **Wrought Iron. Small Hammers,** working up to 500 blows per minute, in some cases being **worked by the Foot** of the Smith, and not requiring any separate Driver.

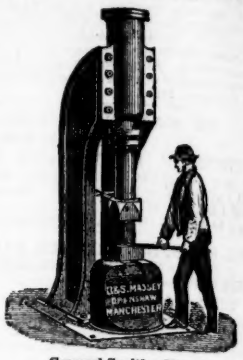
SPECIAL STEAM STAMPS, of great importance for Forging, Stamping, Punching, Bolt-making, Bending, &c.
STEAM HAMMERS for Engineers, Machinists, Shipbuilders, Steel Tilters, Millwrights, Coppersmiths, Railway Carriage and Wagon Builders, Colliery Proprietors, Ship Smiths, Bolt Makers, Cutlers, File Makers, Spindle and Flyer Makers, Spade Makers, Locomotive and other Wheel Makers, &c.; also for Use in Repairing Smithies of Mills and Works of all kinds; for straightening Bars, bending Cranks breaking Pig-iron, &c.


Small Hammer with Foot Motion.

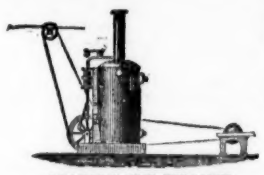

General Smithy Hammer.


Steam Hammer for Heavy Forging.


Special Steam Stamp.


General Smithy Hammer.

From 60 to 100 Steam Hammers and Steam Stamps may usually be seen in construction at the Works.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The ORIGINAL combined Vertical Engines and Boilers, introduced by Mr. CHAPLIN in 1855. Each class kept in Stock for Sale or Hire.

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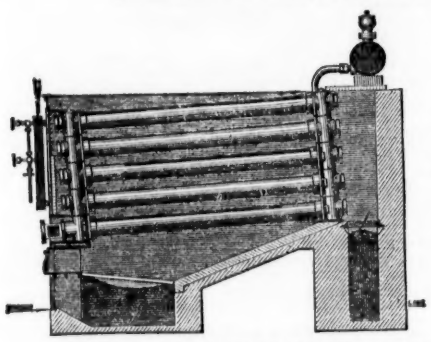
STEAM CRANE.

IMPORTANT TO STEAM USERS.



THE BARROW SHIPBUILDING COMPANY (LIMITED), having purchased the Patents and Business of the

"HOWARD SAFETY BOILER,"

Desire to call the attention of Steam Users to some important improvements recently introduced in these Boilers, by which any points of objection to previous designs are entirely overcome, whilst the valuable principle, so widely recognised, is retained.

In the improved Boiler there is neither welding, screwing, nor rivetting, and the whole of the interior is readily exposed to view and cleaned out. The more simple construction of the improved Boilers admits also of a substantial reduction in price.

Twenty of the Howard Safety Boilers, of 60-horse power each, are in use at Barrow, and altogether about 800 are successfully at work.

FOR FURTHER PARTICULARS, APPLY TO

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BARROW-IN-FURNESS, LANCASHIRE,
OR TO
J. and F. HOWARD, Britannia Ironworks, Bedford.

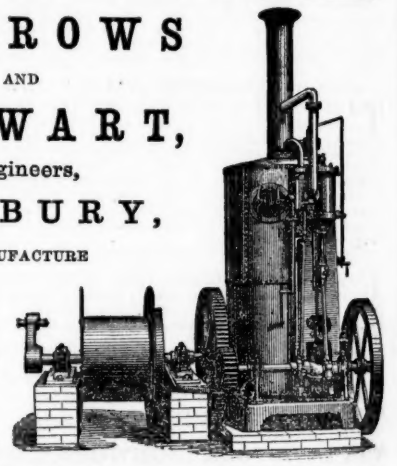
BARROWS AND STEWART,

Engineers,

BANBURY,

MANUFACTURE

Semi-Portable AND Vertical



STEAM ENGINES, FOR PIT SINKING WINDING COAL, PUMPING, &c.

Also COMBINED MILLS and ENGINES for Grinding Slag, Sand, Mortar, &c.

Specifications and prices on application.

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SMITHS' HEARTHS AND FORGES

OF ALL SORTS AND SIZES.

For every kind of Smiths' Work, from the large fire with triple blast, for heavy forgings, to the smallest rivet hearth.

PRICES REDUCED TEN PER CENT., MAY 15.

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(Nine shapes and sizes), with WATER TUYERES, adapted for Fan or Blower Blast.

PORTABLE FORGES

(Four sizes), each complete and self-contained, with a blower which—unlike a fan—is rotated at a slow speed only. These forges are useful either as permanent workshop tools or in colonies, steam-ship engine-rooms, and other places when no steam power or fixed fan is available. Entirely supersedes the use of bellows. *Illustrated Price Lists post free on application.*

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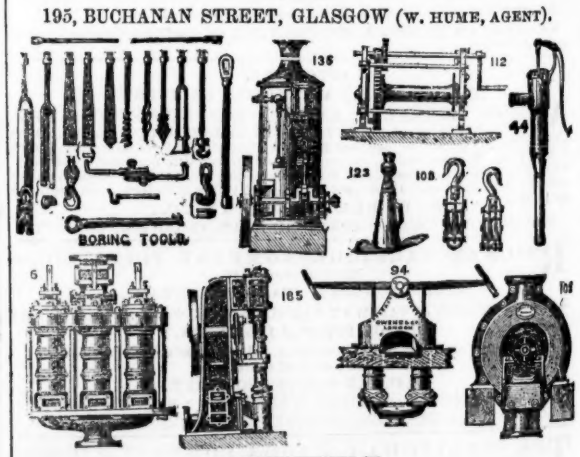
WHITEFRIARSSTREET, FLEETSTREET, LONDON

AND AT

195, BUCHANAN STREET, GLASGOW (W. HUME, AGENT).



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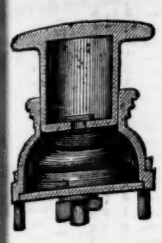
THOMAS TURTON AND SONS,



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TURNING TOOLS, CHISELS, &c.
CAST STEEL PISTON RODS, CRANK PINS, CONNECTING RODS, STRAIGHT and CRANK AXLES, SHAFTS and
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DOUBLE SHEAR STEEL
BLISTER STEEL,
SPRING STEEL,
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LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C.
Where the largest stock of steel, files, tools, &c., may be selected from.

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Are now selling Fire Goods of superior quality, manufactured from clay which has been subjected to the strongest tests, and proved to resist a greater amount of heat than any yet offered in the market.
Samples and prices on application at the Works; or of
BEER, MUSGRAVE, AND CO.,
MERCHANTS,
FALMOUTH.

DYNAMITE
FOR BLASTING PURPOSES, can now be supplied in packages, containing 50 lbs. each, for export to any part of the World.
Nobel's Dynamite, or Safety Giant Blasting Powder,
Is the CHEAPEST and MOST POWERFUL EXPLOSIVE for every kind of MINING and QUARRYING OPERATIONS; for blasting in hard or soft, wet or dry ROCKS; for clearing land of TREE ROOTS and BOULDER STONES; for rending massive BLOCKS of METAL; for SUBAQUEOUS and TORPEDO purposes; and for recovering or clearing away of WRECKS, &c.
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DRIVEN WITH STEAM OR COMPRESSED AIR.
SPECIALLY SUITABLE FOR RAILWAY, QUARRY, AND MINE WORK.
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THE TUCKINGMILL FOUNDRY COMPANY,
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MANUFACTURERS of every description of MINING MACHINERY, TOOLS, MILLWORK, PUMPING, WINDING, & STAMPING ENGINES.
SOLE MAKERS OF
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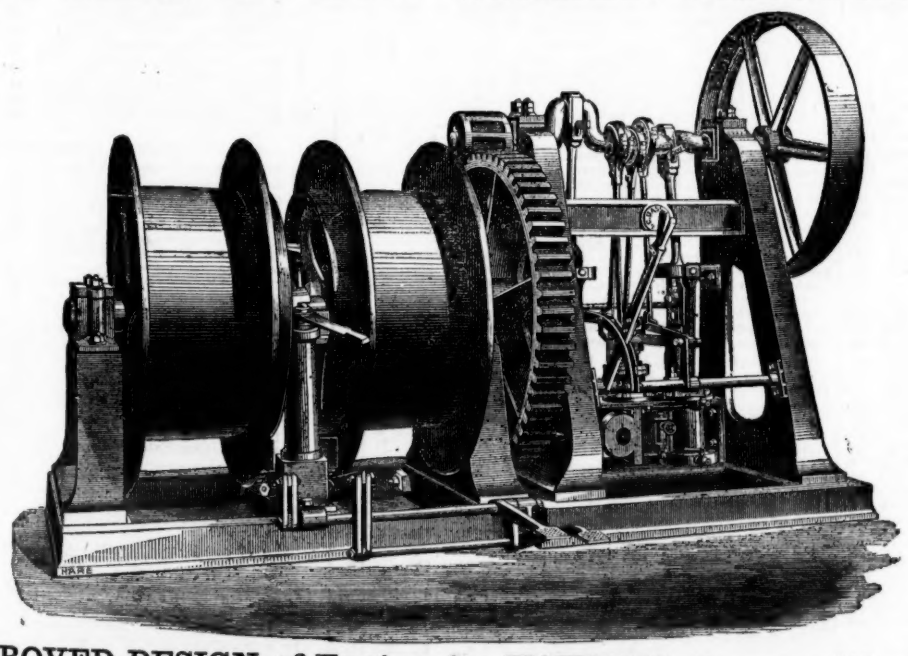

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May also be had with single drum for winding.

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BOILER FEEDER
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MUCH IN USE IN THIS DISTRICT.
THE
STILWELL WATER HEATER
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LIME EXTRACTOR.
THE HALLAM
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These are all high-class inventions, and are with confidence recommended.
CIRCULARS ON APPLICATION

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares	Mines.	Paid.	Last Pr.	Clos. Pr.	Total divs.	Per share.	Last paid
1500	Alderley Edge, c, Cheshire*	10 0 0	—	—	12 1 8	0 5 0	Apr. 1874
60000	Bampfylde, c, s, mn., Devon*	1 0 0	5⅝	2¼ 2⅛	0 2 0	0 2 0	June 1873
5500	Blaen Caelan, s-l, Cardigan* (£4 sh.)	3 10 0	—	—	⅛ 10 9	— —	—
200	Botallack, t, c, St. Just§	116 5 0	57½	55 60	619 15 0	5 6 0	Aug. 1872
10000	Bronfloyd,*† s-l, Cardigan	1 16 0	3¼	3 3½	3 2 6	0 4 0	Nov. 1874
4000	Brookwood, c, Buckfastleigh	5 4 5	¾	1¼ 1½	4 16 3	0 12 6	Oct. 1872
3348	Cargoll, s-l, Newlyn§	2 10 0	—	—	1 6 6	0 2 6	Aug. 1873
6400	Cashwell, l, Cumberland*	2 10 0	—	—	1 6 6	0 2 6	Aug. 1873
1000	Carn Brea, c, t, Illogan†	35 0 0	55	50 52	308 0 0	1 0 0	Feb. 1874
1000	Carn Burra, t, c, Illogan†	20 4 9	10½	9 9½	0 7 6	0 7 6	June 1873
5000	C.th. & Jane, l.* Penrhyndendraeth	5 0 0	—	—	11 17 0	0 7 6	Jan. 1873
2450	Cook's Kitchen, t, Illogan†§	20 4 9	10½	9 9½	116 10 0	0 12 0	May 1872
10240	Devon Gt. Consols, c, Tavistock†* §	1 0 0	2⅝	2 2¾	105 16 8	0 12 6	Dec. 1874
4296	Dolcoath, c, t, Camborne	10 14 10	52	49 50	0 2 0	0 2 0	July 1874
6500	Drake Walls, t, c, Calstock	5 0 0	—	—	0 2 11	0 0 5	Feb. 1874
10000	East Balleswidden, t, Sancreed*	1 0 0	—	—	14 19 0	0 2 0	Oct. 1872
6144	East Caradon, c, St. Cleer†	2 14 6	1¼	⅞ 1⅛	224 10 0	1 0 0	Oct. 1874
300	East Darren, l, Cardiganshire	32 0 0	—	—	13 11 3	0 2 6	May 1873
6400	East Pool, t, c, Illogan	0 9 9	13	12 13	20 7 6	0 7 6	Oct. 1874
1906	East Wheal Lovell, t, Wendron*†	5 19 0	7½	6½ 7	0 1 0	0 1 0	May 1873
5000	Exmouth, s-l, Christow	0 7 6	—	—	80 15 0	0 10 0	Sept. 1872
2800	Foxdale, l, Isle of Man*†	25 0 0	—	—	8 7 4	0 1 6	Jan. 1875
40000	Glasgow Cara., c* [30,000 £1 p., 10,000 15s. p.]	1 0 0	1½	1 1¼	17 9 0	0 6 0	Jan. 1875
15000	Great Laxey, l, Isle of Man*	4 0 0	11	11 11½	0 2 0	0 1 0	Aug. 1874
25000	Great West Van, i, Cardigan*	2 0 0	—	¼ ¾	15 19 6	0 2 6	June 1872
5908	Great Wheal Vor, t, c, Helston†§	40 15 0	—	⅛ ⅜	1 12 0	0 4 0	Oct. 1874
6400	Green Hurth, l, Durham*	0 6 0	—	4½ 5	0 2 0	0 1 4	Dec. 1874
20000	Grogwinion, l, Cardigan*	2 0 0	3¾	— —	0 1 0	0 1 0	Nov. 1874
10240	Gunnislake (Clitters), t, c	5 5 0	1¾	1¼ 1½	80 15 0	0 10 0	Sept. 1872
1024	Herodsfoot, l, near Liskeard†	8 10 0	3¼	3 3¼	62 5 0	0 15 0	Oct. 1872
18000	Hingston Downs, c, Calstock*† (£1 sh.)	2 5 0	1	1 1⅛	4 3 0	0 5 0	Dec. 1872
25000	Killaloe, si, Tipperary	1 0 0	—	—	0 3 11½	0 0 6	Mar. 1873
400	Lisburne, l, Cardiganshire	18 15 0	—	—	564 10 0	1 0 0	July 1874
5120	Lovell, t, Wendron	0 10 0	—	—	0 17 6	0 1 6	Jan. 1874
11000	Melindur Valley, l, Cardigan*	3 0 0	3¼	— —	0 7 2	0 3 7	Jan. 1875
9000	Minera Mining Co., l, Wrexham*..	5 0 0	6	4 6	63 15 2	0 2 0	Nov. 1874
20000	Mining Co. of Ireland, ci, c, l*	7 0 0	—	—	0 8 0	0 3 6	July 1872
12000	North Hendre, l, Wales	2 10 0	—	—	0 17 6	0 2 6	Oct. 1874
2000	North Levant, t, c, St. Just§	12 2 0	4½	3 4	4 13 0	0 12 0	Sept. 1873
7000	Old Treburgett,* s-l, ordinary shares	1 0 0	—	—	0 0 9	0 0 9	Feb. 1874
9000	Old Treburgett,* s-l (10 per ct. pref.)	0 10 0	⅜	⅜ ½	0 0 10⅞	0 0 10½	Feb. 1874
5694	Pedn-an-drea, t, Redruth§	9 2 0	7	6 7	0 5 0	0 5 0	Nov. 1871
5000	Penhalls, t, St. Agnes	3 0 0	2¼	1½ 2	3 9 6	0 2 6	Jan. 1875
50000	Penstruthal, t, c, Gwennap	2 0 0	¾	½ ¾	0 9 0	0 1 0	Nov. 1874
6000	Phœnix, t, c, Linkinhorne§	4 13 4	4½	4 4¼	39 19 10	0 4 0	Nov. 1872
1772	Polberro, t, St. Agnes	15 0 0	—	—	1 12 6	0 5 0	Mar. 1872
18000	Prince Patrick,* s-l, Holywell	1 0 0	3¾	3 3¼	0 9 0	0 2 0	Jan. 1875
1120	Providence, t, Lelant†§	16 16 7	5½	4½ 5	104 12 6	0 10 0	Sept. 1872
2000	Queens, s-l, Holywell*	2 0 0	—	—	0 2 0	0 2 0	Sept. 1874
12000	Roman Gravels, l, Salop*	7 10 0	13	12½ 13	4 10 6	0 8 6	Dec. 1874
10000	Shelton, ci, t, St. Austell	1 0 0	—	—	0 1 0	0 1 0	Feb. 1872
512	South Caradon, c, St. Cleer	1 5 0	115	100 110	719 0 0	2 0 0	Dec. 1874
5000	South Carn Brea, c, t, Illogan§	2 1 6	1¾	1 1½	0 10 0	0 2 6	July 1872
6000	South Darren, l, Cardigan*	3 6 6	—	—	1 1 6	0 1 6	Nov. 1870
10000	So. Pr. Patrick,* s-l. (8000 sh. issued)	1 0 0	2½	2 2¼	0 4 0	0 2 0	Jan. 1875
8771	St. Just Amalgamated, t*	3 10 0	—	—	0 9 0	0 4 0	Nov. 1871
12000	Tankerville, l, Salop*	6 0 0	10½	9½ 9¾	3 8 0	0 6 0	Feb. 1873
6000	Tincroft, c, t, Pool, Illogan†	9 0 0	29	27 28	47 18 6	0 5 0	Feb. 1875
15000	Tretoil,* t, i, Bodmin	2 0 0	—	—	0 1 0	0 1 0	Mar. 1874
4000	Trumpet Consols, t, Helston§	7 10 0	1	¾ 1¼	9 11 0	0 10 0	Nov. 1872
15000	Van, l, Llanidloes*	4 5 0	23	22 24	13 19 6	0 10 0	Dec. 1874
3000	W. Chiverton, l, Perranzabuloe†§	11 10 0	2½	2¼ 2½	52 10 0	0 5 0	June 1873
512	West Tolgus, c, Redruth	98 0 0	68	65 67	3 10 0	1 5 0	Dec. 1874
2048	West Wheal Frances, t, Illogan	37 3 9	10¼	9½ 10	3 12 6	0 5 0	Oct. 1872
512	Wheal Basset, c, Illogan†	5 2 6	15	10 15	638 10 0	1 10 0	Aug. 1872
2048	Wheal Jane, t, Kea	2 13 10	—	—	11 0 0	1 0 0	Dec. 1874
4295	Wheal Kitty, t, St. Agnes	5 4 6	5½	5 5½	11 19 6	0 2 6	Dec. 1874
896	Wheal Margaret, t, Uny Lelant§	15 17 6	—	—	82 2 3	0 10 0	May 1872
80	Wheal Owles, t, St. Just§	76 5 0	75	70 75	522 10 0	4 0 0	Aug. 1872
6000	Wheal Prussia, t, Redruth	2 0 0	4½	— —	0 1 0	0 1 0	Dec. 1874
12000	Wheal Russell, c, Tavistock	1 0 0	—	— —	0 3 3	0 0 6	Nov. 1874
10000	Wheal Whisper, t, c, Warleggan*	1 0 0	—	— —	0 1 6	0 0 6	May 1873
25000	Wicklow c, sul, i, Wicklow	2 10 0	—	— —	52 9 0	0 2 6	Mar. 1872

FOREIGN DIVIDEND MINES.

35500	Alamillos, l, Spain*†	2 0 0	2	1½ 2	1 5 9	0 2 0	Sept. 1874
30000	Almada and Tirito Consol., s*†	1 0 0	⅞	⅜ ¾	0 4 3	0 1 0	May 1873
20000	Australian, c, South Australia†	7 7 6	1¾	1¼ 1¾	0 13 6	0 2 0	Aug. 1874
10000	Battle Mountain,* c, (6240 part pd.)	5 0 0	—	— —	0 10 0	0 10 0	Nov. 1872
15000	Birdseye Creek, g, California*	4 0 0	2⅞	2⅝ 2¾	0 14 0	0 2 6	June 1874
6000	Bensberg, l, Germany*	10 0 0	—	— —	0 17 4	0 8 0	July 1873
12320	Burra Burra,* c, So. Australia	5 0 0	—	— —	56 0 0	0 10 0	Oct. 1872
20000	Cape Copper Mining,*† So. Africa	7 0 0	31½	31 32	18 15 0	1 0 0	Dec. 1874
40000	Cedar Creek, g, California*	5 0 0	1¾	1½ 1⅝	0 5 0	0 2 6	June 1873
30000	Central American Association*†	0 16 6	—	— —	0 6 0	0 1 0	July 1869
15000	Chicago, s, Utah*	10 0 0	—	— —	1 4 0	0 4 0	Jan. 1875
21000	Colorado Terrible, s-l, Colorado*†	5 0 0	4	3½ 3¾	0 13 6	0 4 0	Jan. 1875
76162	Don Pedro North del Rey*†	0 16 0	3/6	¾ 1	2 5 9	0 2 0	Mar. 1872
23500	Eberhardt and Aurora, s, Nevada*†	10 0 0	5⅛	4¾ 5	1 0 0	1 0 0	July 1871
2352	Eldorado, g, Nova Scotia*	10 0 0	—	— —	2 5 0	0 15 0	June 1873
60000	Emma,* g, s, Utah (26,000 fully pd.)	20 0 0	2	1¾ 2	3 12 0	0 6 0	Dec. 1872
70000	English and Australian, c† S. Aust.	2 10 0	2	1¾ 2	2 7 3	0 2 6	Mar. 1873
15000	Ferguson, g, California*	2 0 0	—	— —	0 3 0	0 3 0	April 1872
30000	Flagstaff, s, Utah*	10 0 0	2¼	2⅛ 2⅞	4 2 0	0 5 0	July 1873
25000	Fortuna, l, Spain*†	2 0 0	5	4⅜ 5⅛	4 6 10	0 2 6	Sept. 1874
30000	Gold Run, hyd.	1 0 0	¾	½ ¾	0 2 4	0 0 4	Oct. 1872
68000	Kapunda Mining Co. Australia†	1 3 0	⅛	⅛ ¼	0 2 4	0 0 6	June 1873
20000	Last Chance, s,* Utah	5 0 0	1⅛	1⅛ 1⅜	0 14 0	0 2 0	July 1873
15000	Linares, l, Spain*†	2 0 0	4½	4 4½	14 14 2	0 3 4	Sept. 1874
7837	Lusitanian, Portugal*† (£5 shares).	3 10 0	1¾	¾ 1¾	1 11 6	0 1 6	Mar. 1873
15000	Mammoth Copperopolis of Utah, c, s	10 0 0	—	— —	0 5 0	0 5 0	Dec. 1872
5000	Mountain Chief, s, Utah*	10 0 0	—	— —	0 4 0	0 4 0	Jan. 1873
18000	Prussian Mining & Ironworks, ci, i.	30 0 0	—	— —	6 0 0	0 3 0	July 1873
10000	Pontgibaud, s-l, France†	20 0 0	20	19 21	15 16 8	0 19 9	June 1874
100000	Port Phillip, g, Clunes*†	1 0 0	⅞	¾ ⅞	1 8 0	0 1 0	Jan. 1872
54000	Richmond Consols, s, Nevada*†	5 0 0	7¾	7¼ 7½	2 1 6	0 5 0	Dec. 1874
120000	Scottish Australian Mining Co.*†	1 0 0	1⅝	1½ 1⅝	15 per cent.		Nov. 1874
112500	Sierra Buttes, g, California*†	2 0 0	2¼	1¾ 2¼	1 8 0	0 2 0	Dec. 1873
60000	South Aurora, s, Nevada*	5 0 0	⅜	⅜ ¾	0 14 2	0 2 0	Nov. 1873
£253000	St. John del Rey*† (£5 stock and multiples dealt in)		265	270	10 p. ct. for ½ year		Dec. 1874
15000	Sweetland Creek, g, California*†	4 0 0	2⅝	2¼ 2½	3 0 0	0 2 0	Dec. 1874
20000	Tolima, g, s* (6000 sh. are £5 f. pd.)	4 10 0	3¼	3 3¼	6 11 6	0 6 6	May 1874
500	Westphalian, s-l, c, Prussia*	20 0 0	—	— —	54 0 0	20 0 0	Dec. 1873
15000	Western Andes, s* (New Granada)	5 0 0	5¼	5 5¼	1 13 4	0 10 0	Oct. 1874

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Clos. Pr.	Last Call.
20000	Anglo-Australian, g, Victoria*	2 10 0	—	—	Sept. 1872
20000	Australian United, g, Victoria*†	2 10 0	1½	1 1¼	Fully pd.
8000	Bellavista, s, Peru* (£10 shares)	10 0 0	—	—	Fully pd.
30000	Blue Tent, hyd., California	5 0 0	5½	5⅛ 5⅜	Fully pd.
50000	Braganza, g, Brazil*†	0 15 0	—	—	Oct. 1870
12000	Camp Floyd, s, Utah*	10 0 0	—	—	Fully pd.
35000	Cesena Sulphur Company, Romanga, Italy*	10 0 0	—	—	Fully pd.
50152	Chontales, g, s, Nicaragua*† (and 12,542 of £1 15s.)	2 0 0	¾	½ ⅝	Fully pd.
6000	Clifton, s, Colorado*	5 0 0	—	—	Feb. 1872
10000	Crescent, g, Plumas County, California*	10 0 0	—	—	Fully pd.
100000	Cuiaba, g, Minas Geraes, Brazil*	0 17 6	—	—	June 1872
10000	Douglas, s, Georgetown, Col.	5 0 0	—	—	Fully pd.
35000	Excelsior Hydraulic Gold Washing Co., California*	6 0 0	—	—	Dec. 1871
60000	Exchequer, g, s, California*	1 0 0	—	—	Fully pd.
55000	Frontino and Bolivia, g, New Granada*†	2 0 0	¾	⅜ ½	Fully pd.
50000	General Brazilian, g*	1 0 0	—	—	Fully pd.
10000	Goetzel Tunnel Co., Georgetown, Col.	7 0 0	—	—	Fully pd.
40000	Holcombe Valley, g,* California	1 0 0	1¼	⅜ 1	July 1873
6000	Hornachos,* s-l. (£10 shares) Spain	9 0 0	—	—	Jan. 1874
20000	Imperial Brazilian Collieries, Brazil*	5 0 0	—	—	Fully pd.
20000	Independence, g, California*	5 0 0	2¼	2⅛ 3⅛	Fully pd.
20000	I. X. L., g, s, California*	5 0 0	—	—	Fully pd.
50000	Javali, g, Nicaragua*	2 0 0	⅜	⅜ ½	Fully pd.
12000	Lanestosa,* l, z, Viscaya, Spain (£9 shares)	1 12 6	—	—	Sept. 1874
65000	London and California, g*†	2 0 0	½	½ ⅝	Fully pd.
75000	Malabar, g, Colombia* (65000 issued)	1 0 0	⅝	½ ¾	Fully pd.
4000	Malaga, l, Spain*	10 0 0	—	—	Fully pd.
40000	Malpaso, g, Colombia* (10000 pref. shares, 15s. paid)	1 0 0	1	⅝ ¾	Fully pd.
12000	Menzenberg, c, Honnef, Germany*	5 5 0	—	—	Fully pd.
14000	Montague & Waverley Gold Quartz Crushing Co.,* N. Scot.	2 0 0	—	—	Allotment
6000	Monte Loreto, g, c, Italy*	5 0 0	—	—	Fully pd.
15000	New Pacific, g, s, Nevada*	0 10 0	3/6	¼ ¾	Dec. 1874
66000	New Quebrada, c, Venezuela*	5 0 0	3⅜	3 3¼	Fully pd.
50000	New Rosario, s, Mexico*	1 0 0	1/6	⅜ ½	Fully pd.
20000	New Zealand Kapanga, g, Coromandel*	5 0 0	1⅝	1¼ 1½	Fully pd.
10000	Newfoundland,* i	10 0 0	—	—	Fully pd.
20000	North American, g*	4 0 0	—	—	Fully pd.
80000	Panulcillo, c, Chili*† (£80000 debentures)	4 0 0	1½	⅝ 1⅛	Fully pd.
60000	Pestarena United, g, Italy*†	3 0 0	—	—	Fully pd.
80000	Rica, g, Colombia* (40000 issued)	1 0 0	3/6	⅛ ⅜	Fully pd.
100000	Rio Tinto,* c, Huelva, Spain	10 0 0	10	9½ 10	Jan. 1874
100000	Rossa Grande, g, Brazil*† (£1 shares)	0 19 0	¾	⅝ ¾	July 1872
32500	Ruby Consolidated, s, Nevada*	10 0 0	—	—	Fully pd.
80000	Russia, c, Orenburg and Uta*†	10 0 0	3¾	3 3¼	Fully pd.
25000	San Pedro, c, Chili*	2 0 0	—	—	Fully pd.
30000	Santa Barbara,* g, Brazil (10000 new 10s. sh., 2s. 6d. pd.)	0 9 6	½	⅜ ½	Mar. 1872
10000	Silver Plume, s, Colorado*	1 0 0	—	—	Fully pd.
37500	Snowdrift, s, Colorado*	2 0 0	—	—	Fully pd.
28000	St. Lawrence, g,* California	5 0 0	—	—	Fully pd.
30000	Tecoma, s, Utah*	10 0 0	1⅜	1⅛ 1⅜	Fully pd.
20000	Thornhill Reef, g, Australia*	1 0 0	⅛	¼ ⅜	Fully pd.
42174	United Mexican, s, Mexico*†	28 10 2	½	3½ 3 3¼	May 1868
14000	Utah, g, s-l, Utah*	5 0 0	¼	⅛ ¾	Fully pd.
25000	Victoria (London)*, g, Australia (25,000 sh. 16s. pd.)	1 0 0	—	— —	Fully pd.
75000	Yorke Peninsula, c, South Australia	1 0 0	⅜	⅛ ⅜	Fully pd.
40000	Yorke Peninsula, c, South Australia Preference	1 0 0	1	⅜ 1	Fully pd.

§ Have made calls since last dividend was paid.

NON-DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Clos. Pr.
25000	Aberdaunant, l, Llanidloes*	1 0 0	1⅜	1¼ 1⅜
10000	Aberystwith,* s-l, Cardigan	5 0 0	—	—
12000	Assheton, l, Carnarvonshire*	5 0 0	1½	1¼ 1½
50000	Ballycummisk,* c, Schull	2 0 0	—	—
12000	Bedford Consols, c, Tavistock	1 0 0	—	—
12000	Bedford United, c, Tavistock	1 17 6	⅝	½ ⅝
25000	Belstone,* c, Devon (3000 sh. 10s. pd.)	1 0 0	2	1¼ 2
5000	Blue Hills, t, c, St. Agnes	2 4 6	—	—
15000	Bog, l, Shropshire*	2 0 0	¾	½ ¾
12000	Bowden Hill,* mn	1 0 0	—	—
20000	Brynambor, l, Cardigan	1 0 0	—	—
30000	Burrow & Butson,* t, c, bi, St. Agnes	1 0 0	—	—
20000	Burra Burra,* t, c, bi, Kenwyn	1 0 0	—	—
5468	Bwadrain, s-l, Cardigan* (£4 shares).	3 16 0	—	—
4896	Bwich Consols, s-l, Cardigan*† (£5 sh.)	4 17 6	—	—
12000	Cae Gynon, l, Cardiganshire*†	3 0 0	—	—
30000	Caldbeck Fells, l, Cumberland*	3 0 0	—	—
600	Carden* (£10 shares)	4 0 0	—	—
5584	Carn Camborne, c, t, Camborne	5 3 6	¾	½ ¾
10000	Castle Gate, t, St. Colomb*	1 0 0	—	—
10000	Cathedral, t, c, Gwennap*	1 10 0	1	¾ 1
3000	Cefn Brwyno (lim. to £5)	5 0 0	—	—
10000	Central Van,* l, bl, Llanidloes	1 0 0	1	¾ 1
24000	Court Grange, s l, Cardiganshire	2 0 0	½	⅜ ½
24051	Crenver & Abraham*† (25949 sh. £1).	2 0 0	—	—
15000	Cwm Bychan,* s.l, Montgomery	1 0 0	—	—
15000	Cwm Nant Ddu,* t, Montgomery	1 0 0	—	—
10000	Cwm Ricket and Maesnant, l, Mont.*	2 11 0	—	—
258	Cwmystwith, l, Cardiganshire]	60 0 0	—	—
15000	Deer Park, t,c, Tavistock	2 0 0	—	—
7500	Denbighshire Consolidated, l*	3 0 0	3	2 3
656	Ding Dong, t, Gulval	49 14 6	—	7 8
12000	Dolwen Consols, l, Cardigan*	1 0 0	—	—
10000	Duchy Great Consols, c, Calstock	3 0 0	—	—
15000	Dyliffe,* l, Montgomeryshire	6 0 0	—	—
512	East Basset, c, Redruth†‡	73 10 0	3½	3 4
800	East Black Craig,* l., Scotland	5 0 0	—	—
3000	East Boscaswell, t, St. Just	3 0 0	—	—
6000	East Bottle Hill Cons., t, c, Plympton	6 5 0	1⅜	1¼ 1⅜
4000	East Chiverton, l, Perranzabuloe	10 0 0	—	—
3000	East Dolcoath, t, Illogan	7 2 6	⅝	⅜ ⅝
6000	East Grenville, c, Camborne	13 13 0	—	—
4000	East Gunnislake and So. Bedford, c.	2 0 0	—	—
50000	East Llangynog, l, Montgomery*	2 0 0	1	¾ 1
30000	E. Nant-y-mwyn,* l, Brecknockshire.	1 0 0	—	—
15000	East Van, i, Llanidloes*	5 0 0	—	—
20000	Elgar,* s-l, Cardiganshire	1 0 0	—	—
5000	Flintshire,* l	6 0 0	—	—
12800	Florence and Tonkin United* l.	0 10 0	—	—
10000	Franco Consols, t, c*	1 0 0	—	—
5000	Frank Mills, l, Christow	4 16 0	⅝	½ ⅝
8000	Fronvellan, l, Mont.* [4000 sh. fy. pd.]	0 15 0	—	—
18000	Furze Hill, t, Tavis.*	1 0 0	—	—
3950	Gawton, c, Tavistock	3 17 6	⅝	⅜ ⅝
5000	Gem, t, Whitchurch	2 10 0	—	—
12500	Gilfach, s-l, Llangadock	2 0 0	—	—
10000	Glan Severn, s-l, Flintshire	1 0 0	—	—
15000	Gobbett, t, Dartmoor	1 0 0	—	—
12000	Goginan, and Level Newydd, Card., l	1 5 0	—	—
7500	Gorsedd and Merllyn Consols, l, Flint	2 10 0	2¼	1 1¼
10000	Great Mountain, s-l, Carnarvon*	1 0 0	—	—
2000	Great Retallack, s-l, b, Perranzabuloe	3 8 0	—	—
4400	Gt. West Chiverton, s-l (8000 shares).	2 10 0	—	—
4096	Great Wh. Lovell, t, Wendron	3 4 0	—	—
12000	Islay, l, Scotland*	1 0 0	—	—
6000	Keswick United, l*	5 0 0	—	—
6000	Killifreth, t, Chacewater	1 2 0	—	—
50000	Kingston Valley, l, Cornwall	1 0 0	1¼	1⅛ 1¼
12000	Ladywell,* l, Salop	2 10 0	3	2½ 3
2500	Levant, c, t, St. Just	8 10 0	—	—
10000	Llanarmon, Denbigh	2 0 0	—	—
20000	Llanidloes Wh. Van,* l, Montgomery	1 0 0	3¼	2¾ 3¼
14000	Llanidloes, l, Montgomery*	3 0 0	3½	3 3¼
30000	Llanrwst, l, Carnarvon	2 0 0	2⅝	2⅜ 2⅝
17000	Llywernog, l, Cardiganshire	0 16 0	—	—
9000	Marke Valley, c, Caradon*	4 18 6	1⅜	1⅛ 1¼
6000	Medlyn Moor, t, Wendron	0 12 10	—	—
8000	Mellanear, c, Hayle*	4 0 0	—	—
25000	Mount Dalby, s-l, Isle of Man*	1 0 0	—	—
2524	Nangles, t, c, Kea	9 14 0	½	⅜ ½
4000	Nanty, l, Montgomeryshire*	1 0 0	—	—
2000	Nant y-Ricket,* c, l, Montgom.	5 0 0	—	—
10000	New Beldon, l, Northumberland*	1 0 0	—	—
20000	New Consols, c, Tavistock*	3 0 0	2¼	2 2¼
8000	New Dolcoath, t, c, Camborne*	3 0 0	1½	1 1¼
15000	New Fowey Consols, t, St. Blazey*	3 0 0	½	⅜ ½
4096	New East Lovell, t, Wendron	0 10 0	—	—
2000	New Hendra, t, Breage	2 7 0	1¾	1 1¼
6000	New Hobb's Hill, t, Liskeard*	2 0 0	2	1¾ 2
15000	New North Tamar,* s-l, Beerferris	2 0 0	—	2 2¾
6400	New Pembroke, t, c, Par Station	5 4 6	1	⅝ 1
8000	New Rosewarne, c, Gwinear	4 17 0	¾	⅝ ¾
3200	New South Merliyn, l, Flint*	2 10 0	—	—
8000	New St. Blazey,* t, Cornwall	0 17 6	—	—
1200	New West Rosewarne, t, Gwinear	8 10 0	1½	1 1¼
4000	New Wh. Grylls, t, Perranuthnoe	0 16 6	—	—
1200	New Wh. Seton, c, Camborne	36 16 8	⅝	½ ⅝
25000	North Laxey*	2 0 0	⅞	⅝ ⅞
20000	North Prince Patrick,* l, Holywell	1 0 0	1¼	1 1¼
2000	North Wheal Towan, t, c, Illogan	1 19 6	—	—
10000	North Pool, c, Illogan* (Reserve 2500)	2 0 0	1	½ 1
1000	North Rosewarne, c, Gwinear	6 12 6	—	—
8000	North Treleigh Wood, t, Redruth*	1 0 0	1	¾ 1
5936	North Treskerby, c, St. Agnes	3 12 10	—	—
2000	Old Batholes,* l, Salop	1 10 0	—	—
6000	Old Talargoch, l, Flintshire*	2 0 0	3¼	2 3¼
2500	Old Tincroft, c, t, Illogan*	4 0 0	4½	4 4¼
4000	Parbola, t, Camborne*	5 0 0	5½	5 5¼
16923	Parys Mountain,* c, Anglesea	3 0 0	½	⅜ ½
2000	Penhale Wheal Vor, t, c, Helston*	16 15 0	—	—
12000	Pennerley, i, Shropshire*	2 0 0	1½	1½ 1¾
16000	Perkins Beach, l, Salop*	1 0 0	⅜	¼ ⅜
12000	Plynlimmon, l, Llanidloes*	2 5 0	⅜	⅜ ⅝
1000	Polrose, t, Breage	10 12 6	—	—
2000	Prideaux Wood, t, Llanivery	5 0 0	—	—
12800	Prince of Wales, c, Calstock†	1 5 6	½	⅜ ½
15000	Rookhope Valley, l, Durham*	4 0 0	¾	½ ¾
5869	Rosewall Hill and Ransom, t	4 5 0	⅜	⅜ ½
6000	Rosewarne United, c, t, Gwinear	1 10 0	—	—
3000	Russell, s-l, Swymbridge	0 6 0	—	—
6123	South Condurrow, t, c, Camborne‡	6 5 6	5¼	5 5¼
512	South Dolcoath, c, t, Redruth	12 5 0	1½	1 1⅛
5000	South Great Work, t, St. Hilary	2 14 0	—	—
12000	South Kit Hill, t, Callington*	1 0 0	—	—
12000	South Lisburne, l, bl, Cardigan*	0 12 6	—	—
700	South Margaret, t, Ludgvan	1 10 0	—	—
12000	South Phœnix, t, c, Linkinhorne*	1 0 0	—	—
18000	South Roman Gravels, l, Salop*	1 10 0	1	⅞ 1
6000	South Roskear, t, c, Camborne	6 0 0	—	—
6000	South Tolcarne, t, c, Camborne	0 18 0	⅜	⅛ ⅜
12000	South Van,* l, Montgomeryshire	1 0 0	—	—
3000	South Ward, l, Beerferris	3 0 0	1¼	1 1¼
937	South Wheal Crofty, c, Illogan	34 10 10	16	14 16
496	South Wh. Frances, c, Illogan†	48 3 9	10	8 10
6000	South Wheal Kitty, t, St. Agnes	0 5 0	—	—
4000	St. Agnes Consols, t*	5 0 0	—	—
14000	St. Blazey t.* (£2 10s. shares)	2 0